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TO TEST OR NOT TEST

by

John W. GRUNENWALD

Thesis
G862

AN ABSTRACT

of

TO TEST OR NOT TO TEST

by

John W. Grunenwald

Submitted to the

Faculty of the School of International Service

of The American University

in Partial Fulfillment of

the Requirements for the Degree

of

MASTER OF ARTS

May 1964

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The evolution of the respective positions of the United States and the Soviet Union is traced through a historical analysis of the negotiations with a view to trying to determine where these negotiations will lead.

The main emphasis of the investigation was on the negotiations during the period of July 1, 1958 through June 21, 1963.

The conclusion reached was that an agreement was possible if a common ground for negotiation could be found.

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CHAPTER I

INTRODUCTION

The Nuclear Powers have been conducting negotiations on the discontinuance of nuclear weapons tests almost continuously since July 1, 1958, when the Conference of Experts to Study the Possibility of Detecting Violations of a Possible Agreement on the Suspension of Nuclear Tests was convened.

Why then have the Nuclear Powers been in almost continuous session for over five years and no agreement has been reached? "To Test or Not to Test," the title of this paper, is an attempt to answer that question.

The evolution of the respective positions of the United States and the Soviet Union will be traced through a historical analysis of the negotiations with a view to trying to determine where these negotiations will lead. If they lead to agreement, what mutual benefits will be derived by the Nuclear Powers will also be explored.

The main emphasis of the investigation will be on the negotiations. Starting with the Conference of Experts from July 1, 1958 to August 21, 1958; followed by the Conference on the Discontinuance of Nuclear Weapon Tests, from October 31, 1958 to January 29, 1962; and concluding with the Eighteen-Nation Committee on Disarmament

Conference and its Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests from March 14, 1962 to June 21, 1963. Thus, the period that will be covered will be from July 1, 1958 to June 21, 1963.

From these negotiations has evolved the United States and the Soviet Union's position in reference to the cessation of nuclear weapons tests. A chapter will be spent in putting forth these latest positions as of the first of July, 1963. The purpose of this chapter will be to set forth in concise terms just where the two positions stand in relation to each other.

The next chapter will be a review of the major arguments for the continuation of the nuclear weapons test ban negotiations and their role in the continuation of the negotiations.

The final and concluding chapter will attempt to summarize the course of the paper and in conclusion attempt to predict the future course of the negotiations and nuclear testing, based on the latest positions of the Nuclear Powers and the background of the negotiations.

The major source of information for this investigation will be the verbatim records of the three conferences and their attached documents. Additional sources will be the various publications of documents in the field of disarmament put out by the Department of State and the United States Arms Control and Disarmament Agency.

Conference and its accompanying or I Corps for the rule-
making of nuclear weapon tests took place July 16, 1963 to
June 21, 1963. Then, the pooled test will be resumed not
as from July 1, 1963 to June 21, 1963.

The Power Negotiations has greatly the Nation
Energy and for energy current problem in relations to the
development of nuclear weapon tests. A request was the
Board in getting there also cause problems in of the
Edge of Tech. 1963. The review of this chapter will be
in yet there is another cause that where the nuclear
cause to involve in test energy.

The test weapon will be a period of the water weap-
ports the the commencement of the nuclear weapon test the
negotiations and Soviet role in the commencement of the
negotiations.

The final and monitoring together will cause to
summarize the causes of the report and to conclude some
in general the future course of the negotiations and the
Eastern, Latin to the nuclear facilities in the Soviet
Power and the requirement of the negotiations.

The major issues to commencement the nuclear weapon-
ing will be the nuclear cause is of the power negotiations
and nuclear weapon commerce. Additional weapons will be
the nuclear facilities of Germany in the Cold-of-nu-
clear, yet and by the commencement of these and the United
States Arms Control and Disarmament Agency.

CHAPTER II

CONFERENCE OF EXPERTS TO STUDY THE POSSIBILITY OF DETECTING VIOLATIONS OF A POSSIBLE AGREEMENT ON THE SUSPENSION OF NUCLEAR TESTS JULY 1, 1958 to AUGUST 21, 1958

I. BACKGROUND

With the breakdown of the disarmament negotiations through the United Nations Disarmament Commission in the fall of 1957, a search was begun for other means to continue negotiations.

In January 1958, President Eisenhower sent a letter to Marshal Bulganin in which he proposed that various aspects of disarmament, including the control of a test ban, be studied by technical groups. He included a statement that "these technical studies could, if you wish, be undertaken without commitment as to ultimate acceptance, or to the interdependence, of the propositions involved."[1] This small step indicated a change in the United States position to discuss partial measures of disarmament and established the seed out of which grew the negotiations on a nuclear weapons test ban agreement.

An exchange of letters followed between President Eisenhower and the Soviet Premier, First Marshal Bulganin,

and later Nikita Khrushchev who succeeded him. The Soviet Union continued to press for an immediate suspension of nuclear weapons tests and unilaterally declared the discontinuing of all nuclear weapons tests on March 31, 1958, following an extensive tests series.[2] The United States did not accept the Soviet proposal for immediate suspension of nuclear tests but continued to press for a conference of technicians to study the problem of control. However, the United States continued to view the limitation or suspension of testing as a part of a broad disarmament agreement.[3]

On May 9, 1958, in a letter to President Eisenhower, Premier Khrushchev, after expressing concern that a technical study would delay suspension of tests, agreed "to having both sides designate experts who would immediately begin a study of methods of detecting possible violations of an agreement on the cessation of nuclear tests."[4]

In President Eisenhower's letter to Premier Khrushchev on May 24, 1958, he replied, "experts on our side would be prepared to meet in Geneva with experts from the Soviet side to study methods for detecting possible violations of an agreement on the cessation of nuclear tests."[5]

Premier Khrushchev in his letter to President Eisenhower on May 30, 1958, although continuing to state

his regrets that a technical study would delay a possible agreement, agreed to a meeting at Geneva.[6]

President Eisenhower in his letter to Premier Khrushchev on June 10, 1958, confirmed the site of the meeting and recommended that the conference convene on or about July 1, 1958.[7]

After a further exchange of correspondence, it was finally agreed to convene the conference of experts in Geneva on or about July 1, 1958, with experts from the United States, the United Kingdom, France, Canada, the Soviet Union, Poland, Czechoslovakia, and Rumania to study methods for detecting possible violations of an agreement on the cessation of nuclear tests.[8]

II. THE GENEVA CONFERENCE OF EXPERTS

Introduction

The experts met in Geneva from July 1 to August 21, 1958. They held thirty formal sessions plus several informal meetings at which detailed technical questions were discussed.

In the communique issued at the close of the conference, the group stated that it had come to several agreed conclusions. First,

> . . . that the methods of detecting nuclear explosions available at the present time--namely, the collection of samples of radioactive

debris, the recording of seismic, acoustic and hydro-acoustic waves, and the radio signal method, together with the use of on-site inspection of unidentified events which might be suspected of being nuclear explosions--make it possible, within certain limits, to detect and identify nuclear explosions, and it recommends the use of these methods in a control system.

Second,

. . . that it is technically feasible to set up, with certain capabilities and limitations, a workable and effective control system for the detection of violations of a possible agreement on the worldwide cessation of nuclear weapons tests.

Third,

. . . that the control system should be under the direction of an international control organ which would ensure the co-ordination of the activities of the control system and the functioning of the system in such a way that it would satisfy the necessary technical requirements.[9]

Following the issuance of the communique, the final report of the conference was issued. This report was divided into four sections: general background information, the basic methods of detection and identification of nuclear explosions, the technical equipment of the control system, and the control system.

Background Information

The first order of business after the conference convened was the selection of an agenda. On July 4th, the following agenda was adopted:

1. Exchange of opinions on the problem of the

various methods for detecting atomic explosions and on other general problems of the Conference deliberations.

2. Determination of a list of basic methods of systematic observations for phenomena indicative of an explosion.
3. A system for controlling the observance of an agreement on the cessation of nuclear tests.
4. Drawing up a report of experts to the governments of those countries represented at the Conference, with conclusions and suggestions regarding a system of controlling the observance of an agreement on the cessation of nuclear tests.[10]

In reaching their conclusions, the experts considered the natural phenomena which accompany nuclear explosions. These phenomena (such as, acoustic waves occur when there are explosions in air and in water; seismic oscillations that occur when there are explosions on the ground, under the ground, and under water; the radio pulses that are produced when there are explosions in the atmosphere; and the optical and gamma radiation when propagated over long distances), they said, "serve to indicate explosions and to estimate their time and place." Further, they continued, that when nuclear explosions occur in the atmosphere, radioactive debris is formed which mixes in the atmosphere and is dispersed over great distances. If a nuclear explosion is set off in the ocean or in the earth's crust, the radioactive debris will remain concentrated close to the place of the explosion for a considerable time. Because of these phenomena, they continued, modern instruments make it possible to detect

nuclear explosions at considerable distances. Therefore, they contended, that explosions of high yield which are set off on the surface of the earth and in the lower atmosphere can be detected without difficulty at points remote from the site of the explosions. However, they added, that explosions of low yield can only be detected with good reliability if a specially set up control system is established.

As to this special problem of detecting small explosions, they said, this was so because of the many natural phenomena, earthquakes and thunder storms, which give similar signals or hinder the detection of the signals. They added that it was possible to discriminate between signals of natural events and explosions by careful analysis of the data from several stations. Those that remained unidentified "which could be suspected as being nuclear explosions might be resolved by inspection of the site."[11]

The Conference considered the methods of detecting nuclear explosions by acoustic, hydro-acoustic, seismic oscillations, electro-magnetic oscillations and radioactive debris. Each of these methods was examined for its effectiveness and limitations. Following this, the Conference examined the question of the technical equipment

of the control system and the question of the control system as a whole.

Basic Methods of Detection and Identification of Nuclear Explosions

The experts analyzed the capabilities of five methods of detecting nuclear explosions.

Acoustic Waves. Nuclear explosions in air cause strong acoustic waves which propagate over large distances. The experts stated that the existing apparatus could detect an air wave from a 1-kiloton explosion at relatively large distances--downwind at a distance of 2,000 to 3,000 kilometers and upwind at 500 kilometers. Records from three stations would, they believed, make it possible to determine the location of the explosion with an accuracy of better than 100 kilometers. These methods were considered reliable at heights up to 30 kilometers and possibly even 50 kilometers. Deep underground and underwater explosions would not produce air waves "sufficiently intense for detection purposes." The hydro-acoustic waves produced by underwater explosions in oceans, however, could be detected at distances of about 10,000 kilometers.

Radioactive debris. Nuclear explosions in the air up to 10 kilometers produces radioactive debris which is carried by the wind to great distances. The experts believed that the most convenient conditions for the taking

of samples of the debris would prevail between the fifth and the twentieth day after an explosion, when control posts at distances of 2,000 to 3,000 kilometers should be able to detect a 1-kiloton explosion "with a high degree of reliability." They added, however, that this method was less reliable for underground or underwater explosions. They also considered that aircraft would be useful, both in collecting samples of the air and in search for radioactive clouds that would be produced by nuclear explosions.

Seismic waves. Underground or underwater nuclear explosions produce waves that are propagated through the earth's crust. The experts recognized the difficulty of distinguishing seismic waves produced by nuclear explosions from those caused by earthquakes. Under conditions analogous to those of the United States Rainer shot, they believed that longitudinal seismic waves caused by an underground nuclear explosion of 1 kiloton could be detected, and the direction of the first motion (explosions cause the first movement of the earth to be in a direction away from the source, while earthquakes can often cause the first movement of the earth to be in a direction toward the source) could be determined, at stations considerably more quiet than average and under favorable noise conditions, at distances of 1,000 kilometers and also at 2,000 and 3,500 kilometers. At the same stations

but under noisy conditions, however, this method would be effective only for 5-kiloton explosions. The experts thought that 90 per cent of the earthquakes could be "distinguished from explosions with a high degree of reliability if the direction of first motion of the longitudinal wave is clearly registered at five or more seismic stations on various bearings from the epicentre" and under specified conditions that the area within which an epicenter was localized could be assessed as approximately 100-200 square kilometers. "For those cases which remain unidentified," they said, "inspection of the region will be necessary." By this, they meant that inspectors would have to make on-site investigation of the area where an unidentified event occurred in order to make a positive identification of it. They noted that methods of detecting underground nuclear explosions might be improved in the future by perfecting the technical equipment involved.

Radio signals. Atmospheric nuclear explosions give rise to powerful electromagnetic radiations. The experts stated that a 1-kiloton explosion could be detected by means of radio signals at distances exceeding 6,000 kilometers "assuming that in the neighbourhood of the receiving stations there is no high noise level from local thunderstorms or other sources." The similarity of signals from lightning flashes to those resulting from

nuclear explosions, however, made this method unreliable at great distances. The experts recommended further research on this subject.

High-altitude explosions. Nuclear explosions at altitudes higher than 30-50 kilometers present special problems. Theoretically and on the basis of preliminary data, the experts considered that gamma rays and neutrons produced by nuclear explosions at high altitudes could be registered with "properly instrumented" earth satellites. They also stated that it could be considered possible "to use the recording of ionospheric phenomena, using appropriate radio techniques, and of optical phenomena for the detection of nuclear explosions at high altitudes." They did not consider the problem of detecting nuclear explosions at distances of millions of kilometers from the earth.[12]

The Technical Equipment of the Control System

After this discussion of the methods of detection of nuclear explosions in various environments, the experts described the technical equipment needed at the control posts. They recommended that control posts on continents be equipped with apparatus "for the detection of explosions by the acoustic and seismic methods and also by the methods of recording radio signals and of collecting radioactive debris." Posts on islands or coastal areas should

also, in addition to the equipment for the methods above, be equipped with hydro-acoustic apparatus for detecting underwater explosions. Posts on ships should be equipped with apparatus for collecting radioactive debris and with hydro-acoustic equipment.

The apparatus installed at posts, they said, must be uniform, satisfy basic technical requirements and be designed for reliable continuous operation.

They further recommended that improved apparatus and techniques be actively developed and incorporated into the control system "for the purpose of continuously improving the effectiveness" of the system.[13]

The Control System

The experts concluded that it is technically feasible to establish a workable and effective control system with certain capabilities and limitations which would detect violations of an agreement to suspend nuclear weapons tests.

The control system, they said, should be under the direction of an international control organ which would perform the following functions:

1. The development, testing and acceptance of the technical equipment and stating the criteria for the siting of the control posts.

2. Making continuous and effective observations at control posts and on aircraft.

3. Establishment of reliable communications, using existing channels were suitable, between the control organ and the posts and air bases.

4. Arrange for means of transport for control post personnel and the staff of the international control organ.

5. Timely analysis and processing of data received from the control posts.

6. Timely inspection of unidentified events "which could be suspected of being nuclear explosions."

7. Staffing the control system with qualified specialists.

8. Assist in a scientific research program with the "aim of raising the scientific standard of the system."

Control posts network. The experts recommended a network of 170-180 control posts including 160-170 land control posts and 10 shipborne posts. About 100-110 posts would be situated in continents, 20 on large islands and 40 on small islands. Continental posts in aseismic areas (low earthquake occurrence areas) should be spaced at about 1,700 kilometers and in seismic areas (high earthquake occurrence areas) at about 1,000 kilometers. Oceanic posts would normally be spaced at 2,000 to 3,000 kilometers but the spacing between island posts in seismic areas would be about 1,000 kilometers. This would lead to the following distribution of control posts around the world: North America 24, Europe 6, Asia 37, Australia 7, South America 16, Africa 16, Anarctica 4, 60 control posts on

islands and about 10 ships, for a total of 180 control posts.

Each control post would require about thirty specialists and some auxiliary personnel to staff and operate it. Their duties would include ensuring normal operation of the apparatus, preliminary processing of data and forwarding of this data to the control organization and the government of the host country.

In addition to the control posts, the experts concluded, that there would be regular aircraft flights over the oceans to check on radioactivity in the atmosphere. Additionally, in some cases there would be special flights over the territories of the United States, the United Kingdom, and the Soviet Union to collect air samples for checking on data obtained by other methods.

Additionally, the experts concluded, that when an event is detected which cannot be identified by the international control organ and which is suspected "of being a nuclear explosion" the international organ "can send an inspection group to the site of the event in order to determine whether a nuclear explosion had taken place or not."

Effectiveness of the control system. The experts estimated that the control system would have the following effectiveness:

[illegible]

[illegible]

[illegible]

1. Good probability of detecting and identifying nuclear explosions of yields down to about 1 kiloton, taking place on the surface of the earth, and up to 10 kilometers altitude, and good probability of detecting, but not always of identifying, explosions taking place at altitudes from 10 to 50 kilometers.

2. Good probability of detecting nuclear explosions of 1-kiloton yield set off deep in the open ocean.

3. Good probability of recording seismic signals from deep underground nuclear explosions in continents equivalent to 1 kiloton and above.

The capability of the control system to identify underground nuclear explosions of 1-5 kiloton yield depends on: the small fraction of earthquakes that can be identified on the basis of data obtained from the control posts alone; the fraction of earthquakes that can be identified with the aid of supplementary data obtained from existing seismic stations; and the fraction of events still left unidentified which could be suspected of being nuclear explosions and for which the international control organ would carry out on-site inspections. They estimated on the basis of existing data that the number of earthquakes which would be undistinguishable on the basis of their seismic signals from deep underground nuclear explosions of about 5-kiloton yield could be in continental areas from 20 to 100 a year. The experts concluded that the control system would have great difficulty in obtaining positive identification of a carefully concealed deep

underground explosion but there would always be a possibility of detection of such a violation by inspection.[14]

Summary

The Conference of Experts had studied the capabilities and limitations of the various methods of detecting and identifying nuclear explosions in the various elements. They reviewed and recommended the technical apparatus that should be used in the various control posts. They studied and recommended the type of control system that should be established. The general conclusion reached by the experts was that it is technically feasible to set up, with certain capabilities and limitations, a workable and effective control system for the detection of violations of a possible agreement on the cessation of nuclear weapons tests.

CHAPTER II - FOOTNOTES

[1]"Letter from President Eisenhower to the Soviet Premier (Bulganin), January 12, 1958," Documents on Disarmament 1945-1959, Vol. II 1957-1959 (Washington: Government Printing Office, 1960), pp. 938-940.

[2]Decree of the Supreme Soviet Concerning the Discontinuance of Soviet Atomic and Hydrogen Weapons Tests, March 31, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 978-980.

[3]"Letter From President Eisenhower to the Soviet Premier (Khrushchev) on Nuclear Tests, April 8, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 982-985.

[4]"Letter From the Soviet Premier (Khrushchev) to President Eisenhower, May 9, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 1036-1041.

[5]"Letter From President Eisenhower to the Soviet Premier (Khrushchev), May 24, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 1043-1044.

[6]"Letter from the Soviet Premier (Khrushchev) to President Eisenhower, May 30, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 1050-1051.

[7]"Letter From President Eisenhower to the Soviet Premier (Khrushchev), June 10, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 1051-1052.

[8]"Aide-Memoire From the Soviet Foreign Ministry to the American Embassy: Geneva Experts Conference on Nuclear Tests, June 13, 1958"; "Aide-Memoire From the American Embassy to the Soviet Foreign Ministry: Geneva Experts Conference on Nuclear Tests, June 20, 1958"; "Aide-Memoire From the Soviet Foreign Ministry to the American Embassy: Geneva Experts Conference on Nuclear Tests, June 24, 1958"; "Aide-Memoire From the Soviet Foreign Ministry to the American Embassy: Geneva Experts Conference on Nuclear Tests, June 25, 1958"; "Letter From the American Ambassador (Thompson) to the Soviet Foreign Minister (Gromyko): Geneva Experts Conference on Nuclear Tests, June 26, 1958"; "Aide-Memoire From the Soviet Foreign Ministry to the American Embassy: Geneva Experts Conference on Nuclear Tests, June 28, 1958"; and "Aide-Memoire From the American Embassy to the Soviet Foreign Ministry: Geneva Experts Conference on Nuclear Tests, June 30, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 1074-1084.

CHAPTER II — PROCEEDINGS

[1] "Letter from Frederick Fitzsimmons to the Jewish Publication Society," January 12, 1944, Commonwealth of Pennsylvania Archives, Vol. 12, 1944–1946, Harrisburg, Pennsylvania Printing Office, 1944, pp. 214–216.

[2] "Notice of the Fourteen Jewish Cemeteries Desecrated in Philadelphia of Swastika Alleged to Have Been Painted," March 12, 1945, Commonwealth of Pennsylvania Archives, Vol. 14, 1945–1947, Harrisburg, Pennsylvania Printing Office, 1945, pp. 87–89.

[3] "Letter from Frederick Fitzsimmons to the Jewish Publication Society," April 2, 1945, Commonwealth of Pennsylvania Archives, Vol. 14, 1945–1947, Harrisburg, Pennsylvania Printing Office, 1945, pp. 91–92.

[4] "Letter from the Jewish Publication Society," May 7, 1945, Commonwealth of Pennsylvania Archives, Vol. 14, 1945–1947, Harrisburg, Pennsylvania Printing Office, 1945, pp. 93–94.

[5] "Letter from President Eisenhower to the Jewish Publication Society," May 24, 1953, Commonwealth of Pennsylvania Archives, Vol. 21, 1953–1955, Harrisburg, Pennsylvania Printing Office, 1953, pp. 112–113.

[6] "Letter from the Jewish Publication Society," May 31, 1953, Commonwealth of Pennsylvania Archives, Vol. 21, 1953–1955, Harrisburg, Pennsylvania Printing Office, 1953, pp. 114–116.

[7] "Letter from Jewish Publication Society to the Jewish Publication Society," June 12, 1953, Commonwealth of Pennsylvania Archives, Vol. 21, 1953–1955, Harrisburg, Pennsylvania Printing Office, 1953, pp. 118–119.

[8] "Call-Bulletin from the Jewish Publication Society," The American Bulletin, June 17, 1953, "Call-Bulletin from the Jewish Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 20, 1953, "Call-Bulletin from the Jewish Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 21, 1953, "Call-Bulletin from the Jewish Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 22, 1953, "Letter from the American Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 23, 1953, "Call-Bulletin from the Jewish Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 24, 1953, "Call-Bulletin from the Jewish Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 25, 1953, "Call-Bulletin from the Jewish Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 26, 1953, "Call-Bulletin from the Jewish Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 27, 1953, "Letter from the American Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 28, 1953, "Call-Bulletin from the Jewish Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 29, 1953, and "Call-Bulletin from the American Publication Society to the Jewish Publication Society," Conference on Jewish Publication, June 30, 1953, Commonwealth of Pennsylvania Archives, Vol. 21, 1953–1955, Harrisburg, Pennsylvania Printing Office, 1953, pp. 121–124.

[9]"Communique and Report of the Conference of Experts To Study the Possibility of Detecting Violations of a Possible Agreement on the Suspension of Nuclear Tests, August 21, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 1090-1091.

[10]Ibid., p. 1092.

[11]Ibid., pp. 1092-1093.

[12]Ibid., pp. 1094-1103.

[13]Ibid., pp. 1103-1106.

[14]Ibid., pp. 1106-1111.

CHAPTER III

CONFERENCE ON THE DISCONTINUANCE OF NUCLEAR TESTS
OCTOBER 31, 1958 - JANUARY 29, 1962

I. BACKGROUND

Immediately following the successful conclusion of the Conference of Experts on August 22, 1958, President Eisenhower and the British Government issued statements calling for further negotiations for an agreement with other nations which have tested nuclear weapons for the suspension of nuclear weapons tests and the actual establishment of an international control system on the basis of the experts' report. As part of the agreement to be negotiated, they said, the United States and the United Kingdom were prepared to suspend testing on a year-by-year basis subject to a determination at the beginning of each year that: the agreed inspection system is installed and working effectively; and satisfactory progress is being made in reaching agreement on and implementing major and substantial arms control measures. The statements declared that Western negotiators would be ready to open negotiations on October 31, 1958, in Geneva.[1]

On August 30, 1958, the Soviet Union agreed to commence negotiations with the United States and the

United Kingdom on October 31, 1958, in Geneva and that the conference be fixed for a period of two to three weeks.[2]

In a note to the Soviet Union on September 10, 1958, the United States agreed to hold the conference at Geneva on October 31, 1958; but because of the importance of the negotiations, they should be continued for whatever time may be mutually deemed necessary for their successful conclusion.[3]

The Moratorium

As part of their statements on August 22, 1958, the United States and the United Kingdom agreed to stop testing of nuclear weapons for a period of one year from the beginning of the negotiations. On November 1 and 3, after the Conference had convened, the Soviet Union exploded nuclear devices. President Eisenhower in a statement on November 7, 1958, declared that this action by the Soviet Union had relieved the United States from its voluntary obligations not to test. However, he added: "we shall continue suspension of such tests for the time being, and we understand the United Kingdom will do likewise. We hope that the Soviet Union will also do so."[4] No more Soviet atmospheric tests were held and the voluntary moratorium was observed by the Nuclear Powers until August 30, 1961, when the Soviet Union resumed testing.

Procedure

For purposes of analysis, the Conference on the Discontinuance of Nuclear Weapon Tests is broken down into ten natural periods. There were 353 formal sessions held in private session. The agreed articles of a treaty relating to the prohibition of nuclear weapons test explosions are included in Appendix A. All meetings were held at the Palais des Nations in Geneva, Switzerland.

II. THE FIRST PERIOD OCTOBER 31, 1958 - DECEMBER 19, 1958

Introduction

The Conference on the Discontinuance of Nuclear Weapon Tests convened on October 31, 1958, in Geneva, Switzerland, with the United States, the United Kingdom, and the Soviet Union represented. Twenty-eight formal meetings were held in private session.

The major issues discussed by the Conference during this period were: the agenda; Western views on effective control; the Soviet position on control; the control organization; and the discussion and adoption of several articles for a treaty relating to the prohibition of nuclear weapons tests.

Procedure

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Conclusion

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Search for Agenda

At the first meeting, the Soviet representative introduced a short draft agreement providing for the immediate discontinuance of nuclear weapons tests but which included only a statement that a control system would be established on the basis of the experts' report.[5]

The Western representatives rejected this proposal and proposed that the Conference begin with an examination of the control organization.[6]

Thus, two opposing agendas were suggested: the Soviet Union wanted agreement on suspension of tests first followed by negotiation on a control system; the West wanted to spell out the control system first to be included in the agreement.

Debate on the selection of an agenda occupied the first fifteen meetings and was finally broken when the United States representative suggested that "the best way to move forward from this point is to try to focus our discussion more clearly through consideration of texts of suggested treaty articles which clearly embody the positions which we think are essential."[7]

During the agenda debate in addition to the Soviet draft agreement, the United States submitted a working paper on a treaty on Discontinuance of Nuclear Weapon Tests, including establishment of an effective

international control organization.[8] The United Kingdom submitted two papers: one on some of the initial points requiring consideration in the setting up of an effective international control organization for supervising the observance of an agreement on the discontinuance of nuclear weapons tests, and one on some points not covered in the conclusions of the Conference of Experts requiring consideration in the setting up of an effective international control organization.[9]

Initially, the Soviet Union argued for two separate agreements: one on the discontinuance of testing, and another on the establishment of the control organization. Finally, on November 29, 1958, at the 15th meeting they declared, in spite of their continuing preference for a test ban agreement with a separate protocol on control, the Soviet Union was willing to include the control provisions in the agreement on the cessation of tests. However, they continued to attack the Western position calling for a year-by-year agreement linked to progress in general disarmament.[10]

Thus with the Soviet acceptance of one all-inclusive agreement and the United States representative's suggestion on procedure, the deadlock on an agenda was broken by proceeding without one to consideration of individual articles of a comprehensive treaty.

Western Views on Effective Control

At the 17th meeting, the United States representative outlined the Western views on the type of control organization which should be set up to implement the system recommended by the experts.

First, the organization should be responsible to a commission or board made up of representatives of the three Powers plus a small number of other States participating in the organization. This commission should be responsible for establishing the necessary procedures for the installation, operation, and improvement of the data-gathering facilities in accordance with the agreement. Further, they would also maintain a continuous review of the functioning of the system and the analysis of the data collected by it. It would authorize nuclear detonations for peaceful purposes and make findings on violations of the agreement. It would appoint an administrator who would direct the system. This commission would operate as a permanent body on continuous call.

Second, there should be a conference of parties which would periodically review the general operation of the system.

Third, an administrator appointed by the commission and responsible to the commission would be the chief executive officer of the system. He would be responsible for

implementing the procedures established by the commission for the system and for the analysis of the data which it collects in order to determine whether or not violations of the agreement have occurred. To this end, the administrator and his staff would determine, subject to the approval of the commission, the equipment, construction and location of control posts and other facilities; select and train personnel for the manning of such facilities, and for inspection groups; make technical findings from the data so collected; dispatch inspection groups and special flights; and analyze the results which they obtain.

Fourth, a headquarters must be established to provide the administrator with a mechanism to direct an effective overall operation of the system. This would also include a data analysis center and a central laboratory. Further, because the administrative and logistic problems would be too great, there would be ten regional offices which would provide support for ten or twenty controls posts and aircraft facilities. The organization would have the right to maintain an independent radio network, operated by its own staff, connecting the headquarters with individual control posts, inspection groups and air facilities.[11]

Soviet Position on Control

At the 21st meeting on December 8, 1958, the Soviet Union clarified its position on control. It stipulated

that the Commission would make decisions on all important questions by unanimous agreement among the United States, the United Kingdom and the Soviet Union. Further, the staff of each control post was to be recruited from the nationals of the territory on which it was located; and the director of the post would be a representative of the host country; and a chief control officer would represent the other side. On aircraft sampling flights, one control officer would go along from the other nuclear side. Special flights would be made to collect air samples over the territory of States with the participation of a representative of the Commission, by decision of the Commission in aircraft of such States along routes determined in advance and agreed upon with the governments of such States.[12]

The Control Organization

Western principles on the control organization. At the 23rd meeting on December 11th, the United States representative explained that the control organization must be built on three basic principles:

First, "operation on the basis of majority vote in the Control Organization." He said that the utilization of the Soviet idea of requiring a unanimous vote of the three powers in the Commission would have the effect of a veto provision.

Second, "international rather than national operation of the detection and identification system." The Soviet proposal for national operation imposes more rather than less opportunity for partiality and possible obstruction than would be the case with a true international staff, added the United States representative.

Third, "minimization of the number of political decisions required in the day-to-day operation of the control organization." By this he explained that the United States meant that the basic political decisions would be incorporated in the treaty itself. He continued that

> . . . now is the time, to reach and record as fully as we can practicably do the fundamental decisions as to how this organization should operate. When it is in operation it should be on a basis of timely operation, and timely operation requires that points within the process at which new political decisions are required should be minimized.[13]

Soviet view on the control organization. At the 240 meeting on December 12th, the Soviet representative rebutted the United States statement of basic principles and denied that the Soviet proposals would obstruct the control organization. He stated that the Soviet proposals were based on the concept of cooperation: firstly, between the States taking part in the control system; and secondly, between the control organization and each State party to the agreement. The control organization, he

continued, cannot function without substantial day-to-day assistance of each State party to the agreement and active collaboration on the part of States. He further added that, because the possibility of a violation of a treaty is so serious, no part of the organization should make the final decision except the highest organ, the Control Commission. Further, he continued, the Commission must give thorough examination to evidence submitted by the suspected State to clear itself.

In relation to international staffing, he said, that the Western proposals were based not on technical considerations but on political considerations.[14]

United States submits draft articles on the control organization. At the 25th meeting on December 15, the United States representative submitted for consideration of the Conference draft articles on the duties, functions, and responsibilities of the control organization. These articles (Article VI on the Control Commission, Article VII on the Conference of Parties, Article VIII on the Detection and Identification System, and Article IX on the Administrator and his staff) incorporated the views of the United States which had been set forth in the Conference.

At the 26th meeting on December 16, the United States representative submitted for consideration of the

Conference, a draft Annex I on the Installation, Operation and Improvement of the Detection and Identification System.

Adoption of Treaty Articles

Article 1. At the 20th meeting on December 6, Article 1 was adopted. It was adopted from the Soviet draft agreement proposal and the United States draft treaty working paper proposal. It prohibited the parties from carrying out nuclear tests and to refrain from causing, encouraging or in any way participating in nuclear tests anywhere.[15]

Article 2. At the 21st meeting on December 8, Article 2 for a treaty relating to the prohibition of nuclear weapons tests was adopted by the Conference. It was adopted from the Soviet draft agreement proposal and the United States treaty working paper proposal. The article established a control organization and obligated the Parties to the treaty to cooperate "promptly and fully with the control organization" in the carrying out of its duties in accordance with the provisions of the treaty.[16]

Article 3. At the 24th meeting on December 12, Article 3 for the proposed treaty prohibiting nuclear weapon tests was adopted by the Conference. This article was adopted from the United States draft treaty working paper proposal. It established the control organization which would consist of a Commission; a Detection and

Conference, a draft Treaty on the Prohibition, Production and Stockpiling of the Bacteriological and Chemical Weapons

Adoption of Treaty Articles

Article I. At the 20th meeting on December 21, Article I was accepted. It was adopted from the United Kingdom proposal and the United States draft treaty making such proposal. It prohibits the parties from acquiring any biological agents and toxins from nature, manufacture or in any way participating in making such weapons.[1]

Article II. At the 21st meeting on December 1, Article II, a treaty relating to the prohibition of chemical weapons which was adopted by the conference. It was adopted from the Soviet draft agreement proposal and the United States treaty proposal. The article establishes a method organization and obligation the Parties to the treaty to renounce "forever and fully with the overall supervision" in the carrying out of the duties in accordance with the provisions of the treaty.[2]

Article III. At the 24th meeting on December 11, Article I was the proposal treaty prohibiting chemical weapons treaty was adopted by the conference. This article was adopted from the United States draft treaty making proposal. It prohibits the chemical weapons which would consist of a combination, a detection and

Identification System; and Administrator; and a Conference of Parties.[17]

Article 4. At the 27th meeting on December 17, Article 4 for the proposed treaty was adopted. The article was proposed by the United Kingdom at the 19th meeting. The article set forth the composition of the Commission. It provided that the Commission would consist of one representative from the United States, the United Kingdom, and the Soviet Union as permanent members, plus four other members elected by the Conference of Parties for two year terms.[18]

Summary

The problem of the agenda which presented the Conference with an initial deadlock was solved by proceeding without one. Four treaty articles were adopted without too much debate. The initial debate on the control organization which was held during this period brought out major disagreement over voting procedures in the Commission, duties and powers of the Administrator, staffing, and inspection.

The United States continued to press for a year-by-year agreement tied to progress in the field of disarmament, whereas the Soviet Union wanted an unlimited agreement completely separate of other issues.

Demilitarization Zones, and Demilitarization, and a Treaty on of Guiana.[17]

Article 4. As the 1978 Treaty of Tarapoto (V), Article 4 of the previous treaty was adopted. The articles are presented by the United Kingdom as the 1970 Treaty. The article was fairly low complexity in the negotiations. It provides that the Commission would consist of the representatives from the United States, the United Kingdom, and the Soviet Union as permanent members, and four other members elected by the Contracting Parties for the term three years.[18]

Comment

The problem of the Antarctic Treaty Commission was therefore with an initial decision was reached to proceed without one. This treaty artificial and adopted without too much debate. The initial decision of the Commission meeting which was held during this period concerned the site discussions over which should preside in the Commission during meetings of the Commission, Consultative and Executive.

The United States succeeded in issues the a compromise that allowed that in rotation in the chair of the Commission whereas the United States would be permanent Commission Chairman regardless of other issues.

Some progress had been made, but the differences in the two positions brought out in this initial period indicated a great deal of negotiation would be necessary before they could be brought close enough to reach agreement.

III. THE SECOND PERIOD JANUARY 5, 1959 - MARCH 20, 1959

Introduction

The second period commenced on January 5, 1959, and covered forty-four formal meetings. Three minor draft articles were adopted during this period. Discussion centered around several general topics: new data on underground explosions submitted by the United States; on-site inspection and inspection groups; control post and headquarters staffing; the Soviet veto list; nuclear detonations for peaceful purposes; and elective positions on the Control Commission.

Submission of New Data on Underground Testing

At the first meeting of this period on January 5, 1959, the 29th meeting of the Conference, the United States representative circulated as a Conference document a working paper on new seismic data stating the preliminary results of United States tests held in October 1958. This new data, he said, failed to confirm the conclusions of

the Geneva Conference of Experts in relation to the detection of underground tests. Referring to the preliminary report of President Eisenhower's Science Advisory Committee which analyzed the new data received from the October tests, he declared, they concluded that the method recommended by the Geneva experts for distinguishing earthquakes from explosions, the direction of the first motion of the seismic signal as observed by several stations, was less effective than the experts believed. Further, the new data also showed that the seismic signals produced by underground explosions would be smaller than had been anticipated and that there were, therefore, about twice as many natural earthquakes equivalent to an underground explosion of a given yield as had been estimated by the Conference of Experts. The Committee concluded, he continued, that the total number of unidentified seismic events with energy equivalents larger than 5 kilotons might be increased 10 times over the number estimated by the experts.

Based on the preliminary findings of this new data, the United States representative requested a working group of experts of the three Powers be established by the Conference to study and analyze this new data.[19]

Soviet views on new scientific data. The initial Soviet reaction to the introduction of this new scientific

data was one of suspicion. They viewed it as a Western trick to get "inspection group after inspection group roaming all over a country."[20]

At the meeting on January 7, the Soviet representative gave a fuller critique on the new scientific data submitted by the United States. He refused to accept it as the basis for further technical discussion by the Conference, and reaffirmed their view that the technical basis for the Conference was adequately covered by the conclusions and recommendations of the Conference of Experts. However, he said, they did agree that additional data which was derived by experimentation should be submitted to the control organization to be established by the treaty. He concluded, that the stage of technical study was behind and the main task at the present time was to work out a political agreement.[21]

Continuing debate. On January 23 at the 41st meeting, the United States representative reviewed the Soviet position on the new data and said that he could not accept the premise that new scientific information should be deferred for consideration by the control organization when it is established.[22]

The Soviet Union still refused to consider the new data by a technical working group. The United States did not continue to press for a technical working group during

this period, but held the proposal for future consideration.

Western Powers Drop Disarmament Tie

At the 37th meeting on January 19, 1959, the United States and the United Kingdom made a major move toward reaching agreement. They agreed to drop their insistence that "the duration of the treaty be made conditional upon progress in other fields of disarmament." However, they still retained the condition that the continuation of the agreement would be dependent on the effective operation of the control organization.[23]

On-Site Inspections and Inspection Groups

The question of on-site inspections and inspection groups was given extensive debate during this period.

Western views on on-site inspections and inspection groups. The Western position on on-site inspection was for permanent inspection teams or groups that would be promptly dispatched on the basis of pre-determined criteria and were an essential element of the control system to deter a potential violator of the agreement. Further, on-site inspections were recommended by the Conference of Experts in order to establish the origin or nature of detected events which could be suspected of being of nuclear origin.

On January 28th at the 44th meeting, the United States representative outlined the United States position on inspections and inspection groups. He said:

> We believe in international staffing and we believe that no nationals of the State within which an inspection group will operate should be included as a member of the regular operating inspection staff. We believe that the required number of inspection groups, fortified with the necessary professionally trained personnel and their own technical equipment, their own transportation, and their own communication facilities, would strengthen the scientific and technical capability of the group. We believe that these groups should be formed on a permanent basis and based so as to be immediately available for dispatch to the sites of incidents which could be suspected of being nuclear origin as soon as possible when it is determined they are required. We would like to have the permanently established inspection groups authorized to initiate prompt inspections when the research and analysis center of the headquarters of the system concludes that an event meets the criteria laid down in the treaty and its annexes as constituting a requirement for inspection. We believe that such prompt action is the only possible way to implement the conclusions of the Geneva experts' report which recommends timely inspection of unidentified events which could be suspected of being nuclear explosions.[24]

The United States representative concluded by saying the United States could not accept the Soviet proposal for staffing the groups with nationals of the host country with some "controllers" assigned by the control organization. Further, it could not accept the Soviet contention for groups to be established on an ad hoc basis nor the procedures outlined by the Soviet Union for the dispatching of the teams.[25]

Soviet critique of Western position. The Soviet

reply to this United States declaration centered around the argument that the sending out of inspection groups was a serious political decision that could not be taken automatically. Further, they said, the reply of the country being questioned must be considered before action is taken and it would be "naive" to consider that an inspection group would be able to go to the suspected place without permission of the suspected State.[26]

Soviet views on inspection and inspection groups. At the 45th meeting on January 29, 1959, the Soviet representative put forth the Soviet views on inspection and inspection groups. He declared that inspectors should be chosen from lists of names registered with the Control Commission by each country and include foreigners as well as nationals of the host country; most of the equipment, except for some specialized equipment, would be furnished by the country on whose territory the inspection was being carried out; and an equal number of nationals should accompany the inspection group to represent the country being inspected.

The Soviet represented these views on inspection groups was guided by two basic principles. First, the individual character of each inspection; and second, the need for inspection groups to act in close cooperation

with the government or authorities of the State on whose territory the inspection is being carried out.[27]

At the 48th meeting on February 3, the Soviet representative continued that the Soviet Union did not fear inspection but demanded a veto over dispatch of inspection groups because:

> the fact is that, if decisions are reached by the Control Commission without agreement between the nuclear Powers, the despatch of inspection teams might be transformed into an instrument of the cold war, a means of collecting intelligence data, and therefore a source of danger to the interests of national security.[28]

Continuing debate. The debate continued but no amount of Western discussion could change the Soviet view that the reporting of an unidentified event was a political accusation against the State on whose territory the event occurred. Therefore, the Soviets contended, only the Control Commission could dispatch an inspection team and that agreement among the three Powers was necessary to prevent abuse of the powers of the Commission.

The Western representatives considered on-site inspection to be a key factor of the control system to deter or uncover would-be violators of the treaty. Therefore, they considered that no nation should have the means of obstructing the timely dispatch of inspection teams to determine if a violation had occurred. They said, this fact was concurred in by the Conference of Experts in their conclusions and recommendations.

However, although on-site inspection and inspection groups were the topic of a great deal of discussion, not much progress was made and the initial differences remained at the end of this period.

Control Posts and Headquarters Staffing

The problem of staffing was also given a great deal of discussion. The different positions were aired and clarified, but wide differences on various aspects of staffing were brought to light.

The Western Position. The initial position of the West was that control posts be internationally staffed and that no nationals of the host country could serve in a technical or supervisory capacity.

At the 38th meeting, the United States representative clarified the Western position when he said that personnel at the control posts could come from any country except the host country and that the restriction on nationals only applied to the technical personnel. He further stated that the Western position on international staffing was guided by three principles. First, that selection should be on the basis of technical qualifications and skill. Second, on the widest basis of geographical distribution. Third, selection of candidates should come from those countries which have the greatest interest, this meant major selection from the three nuclear powers.

However, although one-sided bargaining and lucrative terms were the basis of a great deal of litigation, not such progress was made and the United States withdrew via mutual or two-and-or half months.

Capital costs are monopolistic activity

The problem of security was also given a great deal of discussion. The difference positions were stated and clarified, but some differences in nations reports or training were brought to light.

The Eastern Country: The initial position of the meet was that capital costs to international stability that then no nations or the base country could serve in a industrial or transitory capacity.

At the 100 meeting, the Tribal Leader representative clarified the Eastern position when he said that government or the country's price could come low-by crucial except the long cruelty and that the prerequisites on nationals only arrived in the industrial government. He further stated that the nations problem on international security and values by those problems. Then, that nations than should be on the basis of economical qualifications and skill. Second, on the other hand of cooperation situations. Third, selection of nationals should come from those countries which have the greatest interest. This meant water relations from the three nations power.

As to actual selection, he said this should be done by the Administrator within guidelines established by the Control Commission. He added that the major nuclear powers might be given the opportunity to satisfy themselves that the operation of a control post was in accordance with the treaty by the use of observers.

On January 26th at the 42nd meeting, the United Kingdom representative submitted tables showing how different kinds of control posts might be staffed under the Western proposals. The approximate formula used by the United Kingdom in drawing up the tables was that one-half of the technical personnel of the control post would be from either side of the Nuclear Powers, depending on the location of the control post. The other half would be filled by other countries' nationals, except nationals of the host country. Additionally, each post would have one communication post filled by the Nuclear Powers and the seven other communication posts would be filled by nationals of other countries except nationals of the host country. The twenty-one administrative and service positions would be filled by the host country. In countries other than the three Nuclear Powers, the distribution of technical positions would be on the basis of thirds: one-third for the United States or United Kingdom, one-third

for the Soviet Union and the other third for other countries other than the host country.[30]

The Soviet Position. The initial Soviet position on staffing of control posts was that all personnel at the control posts should be nationals of the host country except for one "controller" to represent the other side.

The Soviet Union would not agree to having the administrator select the staff and expressed the thought that he could not be so fair minded so as to look after the interests of all parties to the treaty.[31]

The Soviet reaction to the proposed Western staffing tables was that they would be half Western and half international and this meant that it would be to the advantage of the West. The Soviet representative at the 42nd meeting argued that

> how was the host country to know that data was used honestly or not fabricated for provocative purposes.

However, he did propose, that the number of "controllers" could be increased from one or two to four or five.[32]

On February 2, 1959, at the 47th meeting, the Soviet Union introduced their own staffing table. This table showed that out of a total of thirty personnel at a control post, there would be ten or eleven senior specialists, of these four or five would be foreigners. The remaining nineteen or twenty would be "technicians, operators or

mechanics." The Soviet representative remarked on the basis of the Soviet staffing tables,

> under our latest proposal 50 percent or nearly 50 percent of the highly qualified engineering personnel who would act as controllers at each post would be representatives of the other side - in other words, international or foreign personnel.[33]

Headquarters staffing. At the 46th meeting on January 30, 1959, the Soviet Union outlined its views for the recruitment of technical personnel for the technical set-up of the Control Commission. Recruitment, they said, should be on the basis of parity,

> namely, the staff of the technical set-up of the Control Commission should be recruited from among a number of specialists possessing the necessary technical qualifications, so that half the positions in each section of the technical set-up will be filled with specialists recommended to the Control Commission by the Soviet Union, while the other half of the positions will be filled by specialists recommended by the United States and United Kingdom.[34]

They added that personnel recommended did not have to be nationals of the sponsoring State.

On March 5, 1959, at the 68th meeting, the United States representative proposed that the principle of international staffing could be applied by the Administrator to appoint one-third of the staff from Soviet Union nationals, one-third would be nationals of the United States or the United Kingdom, and the remaining one-third "should be international in character, exclusive of nationals of the three nuclear powers." Further, he added that if a

supervisor in an important position were to be a national of one side, the deputy could be a national of the other.[35]

The Soviet Union rejected this Western proposal after the United States declared that the last third would be appointed strictly on the basis of technical competence and geographical distribution. The Soviet representative declared that this proposal would thus provide a means of gaining control of the control organization by the Western Powers and, therefore, the Soviet Union could not accept it.[36]

Continuing Disagreement. The controversy continued and the differences boiled down to disagreement over the role of the staff in the control organization. The West was primarily concerned with the obstruction or suppression of data if the posts were manned by nationals and the means to build confidence in the system as much as possible. The Soviet Union was concerned that if the posts were staffed by primarily foreigners, they could fabricate or misinterpret evidence detrimental to the host country and in insuring equal representation on the headquarters staff to prevent domination by one side or the other.

The Soviet Veto List

A controversy had arisen in the debate over Article 5 of the treaty which defined the procedural methods of

the Control Commission. The Soviet Union wanted the Commission to take action on substantive matters only with the concurring vote of the three Nuclear Powers. The Western Powers would not accept this in such general terms.

On January 30, 1959, the representative of the Soviet Union submitted to the Conference for consideration a draft amendment to the draft Article 5 on the procedures of the Control Commission. This amendment which became known as the Soviet veto list read as follows:

> Decisions of the Commission shall be made by not less than four affirmative votes of the members of the Commission, including the affirmative votes of the original parties to the Treaty - the USSR, the USA and the United Kingdom - on the following matters:
>
> (a) revision of the Treaty and its annexes, and adoption of amendments thereto;
>
> (b) any accusation against a State of a violation of the Treaty, and other matters relating to violations of the Treaty;
>
> (c) appointments of the Administrator, definition or alteration of his terms of reference, recruitment of the main engineering and technical personnel of the Control Organization's headquarters, controllers and inspection groups;
>
> (d) adoption of a decision to dispatch inspection groups for on-site investigation of an event suspected of being a nuclear explosion, and adoption of decisions on the basis of the results of such investigation;
>
> (e) revision of existing methods and approval of new methods of observation and types of apparatus in the control system;
>
> (f) determination of location sites of the control posts and of the routes for control aircraft flights;
>
> (g) budgetary, financial, administrative and economic matters connected with the Control Organization's activities, including matters relating to the recruitment and dismissal of the supporting and auxiliary personnel.

> Decisions of the Commission on procedural matters shall be made by a majority vote of the members of the Commission.
>
> Each member of the Commission shall have one vote.[37]

Western reaction. The initial Western reaction was put forth by the United States representative when he said, "I am sorry to have to say that many of our understandings and misgivings about how the Soviet delegation would propose to have the system work have been confirmed."[38]

Soviet reply. The Soviet rebuttal to the initial Western response was

> that the Soviet Union has insisted . . . that any decision on the question of control must ensure equality for the Soviet Union within the control organization and equal possibilities for the Soviet Union in regard to the implementation of control through the organization which is to be set up.[39]

Western critique of Soviet veto list. At the 49th meeting on February 5, the United Kingdom representative made a detailed analysis of the Soviet veto proposal. He indicated that the Western Powers recognized the possible unanimous agreement on certain items on the list; namely, revision or amendments of the treaty; revision of existing methods and equipment; and determination of location sites and routes of aircraft flights. However, he was very explicit in rejecting the veto over treaty violations, on-site inspections, and staffing.[40]

Continuing debate. A great deal of debate followed the introduction of the Soviet veto list and brought the

negotiations to the first major crisis. This view was clearly indicated by the United States representative on February 5 when he said,

> the issue is clear. That issue is whether the Soviet Government is prepared to enter into a safeguarded agreement on the discontinuance of nuclear weapon tests. If the Soviet Government continues to insist on a voting formula in the commission which would render the control organization utterly impotent, then indeed we cannot see a successful outcome of our negotiations.[41]

On March 2 at the 65th meeting, the United Kingdom representative summarized the Western position in reference to the Soviet veto list. He said:

> We agree with the Soviet delegation that the unanimous consent of the three original parties should be required for the entry into force of amendments to the treaty and its annexes, including amendments affecting the terms of reference of the administrator as laid down in the treaty and also amendments which would alter the actual treaty provisions on techniques of control. But we do not agree that there should be a vote in the commission on these subjects . . . should be covered by our draft article on amendments to the treaty.
>
> Secondly, we are prepared, subject to certain conditions which I have stated, to give the original parties a veto on the appointment of the administrator and on siting of control posts and routing of aircraft flights.
>
> Thirdly, we do not agree at all with the rest of the Soviet list. In particular, we are absolutely opposed to the provision . . . relating to violations of the treaty and to on-site inspection. On these subjects we do not wish to possess the right of veto ourselves. We want neither an individual right of veto nor an automatic majority in the commission which would give the United States and the United Kingdom jointly a voting power equivalent to a veto. We do not want that. Neither do we agree that the Soviet Union should possess the unilateral right of veto and thus have the unilateral right of imposing its own will on all the other parties.[42]

The Soviet Union replied on March 4 that they agreed with some elements of the United Kingdom's statement on March 2 and that there might be some basis for discussion whereby the comprehensive list put forth by the Soviet Union would not be necessary.[43]

With the introduction of the Soviet veto list, the differences of positions in relation to the concept of the organization, functions and duties of the control organization became apparent between the two sides.

Nuclear Detonations for Peaceful Purposes

On January 30th at the 46th meeting, the United States representative introduced a draft treaty article titled "Detonations for Peaceful Purposes," which outlined the means to be incorporated into the treaty to permit peaceful nuclear detonations under appropriate control safeguards. Under this proposal, the nuclear devices to be used in peaceful uses explosions would be placed in a depository on or before the date of entry into force of the treaty and then be kept under continuous surveillance by representatives of the control organization until detonation. The control representative could inspect any parts that were replaced during the surveillance period, but they would not be permitted to inspect the internal design of the device. The proposal also provided that other devices could be used, but that the party exploding the device

The Jordan Valley Section of Mapai's Ilaat Kibbutz Ha'oved with some elements of the Tamiut Kibbutzim's ideology so that I had that there might be some basis for discussion whether the ideologically like yet found by the Jordan Valley would be necessary.[1]

With the determination of the Kibbutz then that, the difference of opinions in relation to the economy of the organization, functions and duties of the central organization between supporters between the two sides.

<u>Further Deliberations for Economic Progress</u>

In January 1954 at the meeting, the Tamiut Section representatives introduced a draft treaty article claiming "necessities for economic progress" which matters the needs to be incorporated into the treaty in general problems involve determined under appropriate decision adequate. Under this proposal, the matters having to be used in peaceful land workings would be placed in a department so as before the date of entry into the treaty and then be kept under consideration mutually by representatives of the central organization with Tamiut. The central representative again stressed by pointing that were continue the job the workmanship, the one would not be permitted to interpret the technical change in the valley. The important also-prepared this after service would be made, but that the party including the Jordan

must in this case permit full internal and external examination of the device by representatives of the other original parties.[44]

Soviet response to peaceful detonation proposal. The initial Soviet response to the draft article on peaceful detonations of nuclear explosions was that they preferred to prohibit absolutely the explosion of nuclear devices for any purposes whatsoever because the results of any explosions, can be used in any case for further increasing the destructive force of atomic and hydrogen weapons. The Soviet representative further stipulated that if the West demanded the right for peaceful explosions then the Soviet Union would demand equal right to the same number that the United States and the United Kingdom together detonate.[45]

On February 23, the Soviet representative made a formal reply to the proposal. He declared that the draft article provides a loophole for a country to continue nuclear weapons tests under the guise of nuclear explosions for peaceful purposes. This could be accomplished, he said, because the draft article does not allow internal inspection of the mechanism; thus, external inspection will not give the inspectors any guarantee that a new nuclear device is being exploded in an old outward form. The Soviet representative then introduced a Soviet draft

most in this case permit full internal and external control of the device by representatives of the other national parties.[11]

Under cover of peaceful cooperation provided the initial novice requires in the early article on political developments of nuclear weapons was that they preferred to publish something the methods of making bombs for any partners whatever because the product may explodes, and he said in any case for further increasing the destructive force of atomic and hydrogen weapons. The Soviet representatives further stipulated that if the West demanded the right for nuclear weapons then the Soviet Union would demand equal right to the same number that the United States and the United Kingdom together demand.[12]

On February 17, the Soviet representative made a formal reply to the proposal. It declared that the Soviet Union provides a formula for a country to manufacture nuclear weapons that make the price of nuclear explosions are peaceful purposes. This could be accomplished, he said, because the Soviet Union does not allow foreign inspection of the mechanisms then, assessed inspection will not give the inspectors any guarantee that a new nuclear device is being produced in an old nuclear field. The Soviet representative then introduced a novel idea:

article concerning nuclear explosions for peaceful purposes. This article proposed a limited and mutually agreed number of nuclear explosions for peaceful purposes. Such explosions to be carried out on a one-for-one basis. The following conditions would also have to be met: submit beforehand to the other original parties to the treaty a complete description and the blueprints of the construction of the device to be exploded; permit the inspection of the internal and external construction of the device to be exploded; carry out strict international control on the site of the explosion with the mandatory participation of representatives of all the States, original parties to the treaty; submit all data obtained as a result of the explosion to the original parties.[46]

No further action on these two draft articles on peaceful detonations of nuclear explosions.

Composition of the Control Commission

It had been previously agreed with the adoption of Article 4 of the proposed treaty that the Control Commission would consist of the United Kingdom, the Soviet Union, and the United States, plus four other States chosen by the Conference of Parties. At the 52nd meeting on February 11, the Soviet Union proposed that the four other seats be distributed to give each side equal representation. They recommended a 3-3-1 representation. By this formula the

Soviet Union would get three seats, the United States and the United Kingdom three seats, and the last seat would be given to a neutral mutually acceptable to both sides.[47]

Debate over this proposal. The Western answer to this proposal was that the Western Powers would be prepared to discuss a mutually acceptable formula for composition of the Commission which would guarantee that neither side would be able to dominate the Commission if the Soviet Union would agree to drop the veto. The Western Powers then proposed that the four seats be allotted, one to a Soviet ally and one to a Western ally, and the other two seats to countries not committed to either side.[48]

The Soviet representative rejected this Western proposal because it would give the West more seats than the Soviet bloc. He reaffirmed the Soviet position that the control organization should be organized on equal representation or parity for the two sides. Therefore, he said, the Soviet 3-3-1 proposal would be a more representative body to enjoy the appropriate authority in our international relations.[49]

Thus, the Conference had two counter proposals on the composition of the control Commission also.

Adoption of Draft Treaty Articles

On March 19th at the 72nd meeting, the Conference formally adopted three articles for the treaty on the

prohibition of nuclear weapons tests. The article on duration, the article on periodic review of the system, and the article on registration of the treaty.[50] These articles were all procedural articles and did not constitute any area of disagreement but they did add to the growing list of treaty articles adopted by the Conference as it moved closer to agreement.

Summary

At the close of this period, various elements of a Treaty on the Discontinuance of Nuclear Weapons Tests were beginning to take shape. Many draft articles had been put before the Conference for consideration; some had already been adopted without substantial disagreement. However, the basic differences on the elements of control continued to keep the Conference from reaching full agreement on a Treaty. Some progress had been made; many of the differences had been brought out into the light; but many of the issues were fundamental, and a great deal of negotiation would be required to bring the positions closer so that agreement could be reached.

IV. THE THIRD PERIOD APRIL 13, 1959 - MAY 8, 1959

Introduction

The third period commenced on April 13, 1959, after an Easter recess from March 20. Until the Conference was

recessed on May 8th, they held seventeen formal meetings. The main topics of discussion during this period were the phased treaty proposal submitted by the United States, the Soviet annual quota of on-site inspections proposal, continuing debate on staffing, and the discussion and adoption of many minor articles of the proposed treaty.

Phased Agreement Proposal

At the 73rd meeting on April 13th, the United States representative reviewed the major obstacles to reaching an agreement. He stated these as:

> first, there is the issue of whether there will be effective procedures to govern on-site inspection; secondly, there is the general problem of voting procedures in the control commission; and thirdly, there is the problem of staffing of control posts.

As a means out of the impasse on the above issues, the United States representative proposed:

> (a) That we agree in principle that a total agreed and inspected ban on nuclear tests will go into effect in phases as agreement is reached in these negotiations or in the control commission on the relevant control mechanisms and as such agreements are incorporated in the treaty.
> (b) That the first phase, on which we could reach early agreement, could consist of a cessation of tests in the atmosphere, and if the USSR is willing, under water.
> (c) That we should continue here to try to resolve the political and technical problems . . . which must be solved if we are to have an effective system for the detection of tests underground and at very high altitudes.
> (d) That joint studies, research and negotiation, including such joint experiments as may be deemed useful, should begin immediately.[51]

[illegible] on May 20, [illegible] agreement formal meeting.

The main topics of discussion during this period were the [illegible] proposal submitted by the United States, the Soviet counter [illegible] technical inspection proposals, [illegible] of [illegible] on [illegible], and [illegible] of many minor articles in the proposed treaty.

Third meeting

At the third meeting on April 1[illegible], the Soviet delegation [illegible] the [illegible] to [illegible] agreement. Mr. Zorin said:

> First, there is the issue of nuclear stocks. All the activities provided for under the [illegible] agreement, there is no general prohibition of nuclear production in the nuclear countries, and thirdly, there is the problem of activity in [illegible] space.
>
> As a basis for the discussion on the above issues, the United States [illegible] proposals.
>
> (a) First we agree in principle that a total [illegible] and transported into nuclear [illegible] will be less [illegible] to [illegible] in [illegible] specialists of the nuclear countries on the [illegible] control mechanisms and as such agreements are [illegible] in the treaty.
>
> (b) With the first phase, or major [illegible] nuclear armament, [illegible] of a reduction of [illegible] in the armaments, and if the [illegible] is utilized under [illegible].
>
> (c) This we should [illegible] this is by no [illegible] the political and technical problems [illegible] which we arrived if we are to move in [illegible] [illegible] the [illegible] of both [illegible] and [illegible] [illegible] difficulties.
>
> (d) With [illegible] treaties, [illegible] [illegible] [illegible]

Soviet Reaction to phased agreement proposal. The initial Soviet reaction to the United States phased agreement proposal was to reject it because it would not stop but allow testing in outer space and underground. The Soviet Union continued to press for a comprehensive treaty.[52]

At the 83rd meeting on April 27, the Soviet representative read into the records of the Conference a letter from Premier Khrushchev to President Eisenhower which formally rejected the United States proposal for a phased agreement and continued to emphasize the Soviet desire for a comprehensive ban on all nuclear weapons tests.[53]

Soviet Proposal of Annual Quota of On-Site Inspections

As a way out of the impasse over the dispatching of inspection teams and on-site inspections, the Soviet Union introduced a proposal at the 83rd meeting on April 27 for an annual quota of on-site inspections. The Soviet representative proposed that

> we should agree to conduct each year a pre-determined number of inspections, on the territory of the Soviet Union and on that of the United States and Great Britain and their possessions. The despatch of inspection groups must be based on objective readings of instruments in the control posts indicating the occurrence of events which may be suspected to be nuclear explosions.[54]

Western reaction. The Western reaction to this proposal was that it was too general and did not clearly

Soviet reaction to Greek economic recovery. The Soviet Union reacted on the Greek Civil War [illegible] [illegible] [illegible]

show the relationship to the Soviet request for a veto on inspections and dispatching of on-site inspection teams. However, it did offer possibilities, they said, if the Soviet Union would drop its insistence on a veto on the decision that inspection was justified or on the dispatch of the inspection group. Further, they added, both the nature of the criteria and the number of inspections to be required must depend upon the evaluation of the scientific evidence available regarding detection of underground tests.[55]

Soviet reply. On April 28, 1959, at the 84th meeting the Soviet representative answered the questions posed by the Western representatives in relation to the proposal. He stated in relation to criteria, "the fixed number of inspections we agree upon must be carried out on the basis of instrument and equipment readings--in other words--on the basis of technical criteria." On the question of voting procedures in the control commission, he stated that,

> once we agree on a specific number of inspections per year for each side, the role of the control commission will be very simple as regards the despatching an inspection team . . . . We do not in this case insist on the principle of unanimous decision being applied in every single case as between the three nuclear powers.

In regards to the relationship between the events that can be inspected and the quota in order to define this quota, he said, "the point here is that we must reach a sensible

political compromise, because any attempt to deal with this question on purely technical lines would lead us down a blind alley."[56]

Western counter-reply. On May 24 at the 89th meeting, the United States representative made a formal reply to the Soviet quota proposal. He made this general observation:

> we do not yet have sufficient information on the precise details of this Soviet proposal, either as to its technical reliability or as to the reliability of organizational arrangements for the overall control system, to enable us to judge whether it would ensure effectiveness of control.

He reaffirmed the Western position that the level of inspection to take place must bear an appropriate relationship to scientific facts and to the detection capabilities of the control system, and that inspection would be undertaken only for the purpose of identifying an unidentified disturbance which could be a nuclear explosion.[57]

Continuing Discussion on Staffing

The discussions on staffing of control posts continued during this period, and the Soviet representative clarified the Soviet position on this question during the 75th meeting on April 15, 1959. He stated the Soviet position on staffing was: first, that the foreign specialists would have routine operational duties which depended on the posts they occupied and for which they would be responsible to the chief of post; second, that the foreign specialists would be an organic part of the total staff and

would, according to the positions they occupied, have direct operational responsibility for functioning of instruments and reading of records and reporting on these; third, that foreign specialists according to the position they held, would be entitled to issue orders and instructions to the appropriate operators and maintenance staff at the control posts; fourth, that one of the senior foreign specialists who holds the appropriate position will be entitled to communicate directly with the control commission if he has some individual view and disagrees with conclusions or proposals of the chief of post; fifth, on the question of the nationality of the head of the post, he must be a national of the country in whose territory the post is situated.[58]

Although views did clarify the Soviet position somewhat, there was no appreciable headway toward reaching agreement on this subject during this period. Nor did the West submit any new proposals.

Adoption of Treaty Articles

The following treaty articles were adopted during this period:

14 April - article on amendments

16 April - article on relationships with other international organizations

17 April - preamble for the treaty.

21 April - article on annexes

24 April - article on parties to the treaty

27 April - article on undertakings concerning co-operation with the system

29 April - article on authentic texts

4 May - article on signature, ratification, acceptance and entry into force.

6 May - article on privileges and immunities

8 May - article on installation and operation of the system in Parties territories

8 May - article on the Conference.[59]

Summary

The adoption of the many above articles was a major step forward, but they were all technical or procedural articles over which there was very little disagreement. With the adoption of these articles it narrowed down the area of disagreement to the control organization where the major differences were involved.

At the request of the United States, the Conference was recessed on May 8, to be reconvened at a date and time to be agreed upon by the three delegations.[60]

V. THE FOURTH PERIOD JUNE 8, 1959 - AUGUST 26, 1959

Introduction

The Conference reconvened on June 8, 1959, after a

[illegible] – activity of [illegible]

[illegible] – activity of [illegible] to the [illegible]

[illegible] – activity of [illegible] [illegible] operations with the system

[illegible] – activity of [illegible] [illegible]

[illegible] – activity of [illegible], [illegible], [illegible] [illegible] and [illegible] [illegible]

[illegible] – activity of [illegible] [illegible]

[illegible] – activity of [illegible] [illegible] [illegible]

recess from May 8, 1959. Discussion followed through thirty-eight formal meetings before the Conference was recessed on August 26, 1959. Primary discussion revolved around the establishment and report of the Technical Working Group on high altitude tests; new seismic data submitted by the United States; the Soviet quota proposal; Western staffing proposal; the budget and the veto; and the preparatory commission proposal.

Establishment and Report of the Technical Working Group I

During the recess, Premier Khrushchev on May 14, 1959, in a letter to President Eisenhower finally agreed to the setting up of a Technical Working Group to make recommendations on the detecting of nuclear explosions above 30-50 kilometers.[61]

At the 95th meeting on June 15, the Conference formally agreed to establish a Technical Working Group of experts from the three Nuclear Powers to study questions relating to the detection of high altitude nuclear explosions. Their term of reference was:

> The Technical Working Group should assess the capabilities and limitations of possible techniques for the detection and identification of nuclear explosions at high altitudes (More than 30-50 kilometers) above the earth and, on the basis of the discussions and conclusions of the Geneva Conference of Experts, recommend techniques and instrumentation for consideration by the Conference for incorporation in the detection and identification system.[62]

Tuesday from May 8, 1980. Discussions followed through Sunday-night formal meetings before the conference was recessed on August 22, 1976. Advanced discussion sessions among the specialists and reports of the Technical Working Group on high altitude tests have already been embodied in the United Systems, the Design and the Pilot and the preliminary assessment procedure.

Feasibility and Costs of the Technical Testing Group:

During the recess, Frank Carlucco on May 12, 1979, in a letter to Twelfth Congressman Clarity Byrne of the setting up of a Technical Testing Group to make recommendations on the feasibility of building equipment above 30-50 kilometers.[7]

As the TTG meeting on June 17, the Conference Secretary agreed to establish a Technical Working Group of experts from the Lunar Station Power to study questions relating to the technical of high altitude nuclear explosions. Their task of reference was:

The Technical Working Group should review the capabilities and limitations of possible technical for the detection and identification of nuclear explosions at high altitudes (from 30-50 kilometers) (over the Pacific ocean), on the basis of the knowledge and capabilities of the testing conference of experts, recommend technical and instrumentation for monitoring by the Conference (or interpretation in the direction and identification system.[8]

Report of the Technical Working Group. The group that was established was formally called Technical Working Group I and submitted its report to the Conference at its 109th meeting on July 10.

The report of the Group stated that they concluded that the detection of high altitude nuclear explosions was technically feasible. They made the following recommendations on techniques and instrumentation for the detection and identification of nuclear explosions at high altitudes above the Earth for consideration by the Conference for incorporation in the detection and identification system.

1. A system should be established consisting of 5-6 earth satellites placed in orbits at altitudes of more than 30,000 kilometers. They should be equipped for the detection of gamma rays, delayed gamma rays, neutrons, and soft X-rays.

2. For a low altitude earth satellite system two systems were recommended:

a. A system of 6-10 satellites appropriately placed in near circular orbits at altitudes of 500-700 kilometers. This would assure surveillance below an altitude of 2,000 kilometers and would be equipped for the same detection as the high altitude system.

b. A system of 2-4 satellites appropriately placed in near circular orbits at altitudes of 500-700

Report of the Technical Advisory Group. (The Report that was published was formally called Technical Report Group 1 and included its review by the Conference at the 1958 meeting on July 16).

The report of the Group stated that they considered that the development of high altitude ionospheric-propagation was technically feasible. They made the following recommendations and interpretations for the development and establishment of medium wavelengths at high altitudes where the need for communication by the Conference for Emergencies in the Antarctic and Intercontinental systems.

1. A system should be established operating at 3-4 megacycles planned to provide a altitude of more than 10,000 kilometers. They should be employed for the exchange of power supply, telegraph, radio data, monitoring, and self X-rays.

2. For a low altitude short intercontinental system two systems were recommended:

a. A system of 8-12 megacycles equipment planned to have distance under an altitude of 300-700 kilometers. This would mature intercontinents below an altitude of 2,000 kilometers and would be employed for the same purposes as the high altitude system.

b. A system of 3-4 megacycles equipment planned to have distance under an altitude of 300-700

kilometers. This would assure surveillance below an altitude of 10,000 kilometers. They would be equipped for the same detection as the high altitude system.

3. A satellite should be placed into an appropriate elliptical orbit around the earth to provide maximum coverage of the region in the earth's magnetic field in which electron trappings occur.

4. To extend the system to provide increased coverage of the regions behind the moon and the sun away from the earth, a system of four satellites should be placed in appropriate solar orbits, of radius approximating that of the earth around the sun, when the state of the technology permits.

5. Each satellite should carry instrumentation to achieve the maximum reliability and range of detection of nuclear explosions in space and carry apparatus for checking the performance of the equipment of the satellite. All required data, including levels of background, signals, and performance data should be transmitted to a suitable number of control posts. Suitable equipment for receiving and analyzing data should be installed in these control posts in order to ensure the rapid and reliable analysis of signals received from the satellite.

6. Additionally, the following techniques and instrumentation should be installed at ground posts:

a. Multiple channel optical detectors.

b. Optical equipment suitable for observing fluorescence in the upper atmosphere.

c. Equipment suitable for measuring the absorption of cosmic radio noise in the ionosphere.

d. Equipment suitable for recording radio signals.[63]

Acceptance of the findings of the Group by the Conference. At the 121st meeting on August 10, the Soviet representative stated that the Soviet Government "agrees to the inclusion of the methods and instrumentation recommended in the report of the experts . . . in the system of control over the cessation of nuclear tests."[64]

The representative of the United Kingdom stated that

> the United Kingdom accepts the report of the high-altitude Working Group as a correct technical assessment of possible techniques for the detection and identification of high-altitude nuclear explosions in the light of scientific knowledge available at the time of the Working Group's session.

Further, he stated that the United Kingdom was "prepared to take part in discussions regarding the embodiment in the treaty of provisions on high-altitude controls, in the light of the recommendations contained in the report."[65]

On August 26th at the 127th meeting, the United States representative stated that

> the United States accepts the report as a correct technical assessment of the capabilities and limitations of possible techniques for the detection and

> identification of high-altitude nuclear explosions in the light of presently available scientific knowledge. /Further, he said/ the United States is now considering the complex problems of the timing and scope of the high-altitude detection system to be established on the basis of the aforesaid report, problems which are brought into focus in translating into specific treaty language the results of the broad technical survey of feasibilities and alternatives contained in the report.[66]

Although the report of the experts was accepted by the Conference no further action was taken during this period except that the United States said that it would be incorporated into Annex I on the Detection and Identification System which was proposed by the United States on December 16, 1958.[67]

New Seismic Data Submitted by the United States

The discussion of new seismic data was again reintroduced into the meetings when on June 12, 1959, at the 94th meeting, the United States representative introduced the findings of the Berkner Panel. This panel of United States experts was established by President Eisenhower's Special Assistant for Science and Technology under the chairmanship of Dr. Berkner. The panel was to study the possibility of improving the Geneva system within existing technology and through a program of seismological research. They would also investigate the possibility that underground tests might be successfully concealed. The report they submitted re-emphasized the need for additional

research programs in seismology. They concluded that this program could improve the detection and identification system to bring the system to the capability as was originally estimated by the 1958 Conference of Experts. On the basis of this report, the United States representative proposed that the Conference establish a technical study group to review the identification and detection system in the light of the new data.[68]

Soviet reaction. The Soviet representative commenting on the new data said, "we take an unfavourable view of the question of revising the experts recommendations on underground nuclear explosions."[69]

On June 17th, the Soviet representative formally replied to the United States proposal for the establishment of a technical study group to consider the new data. He said "the only purpose that can be served by the Western insistence on a technical study group to study new data was to drag out the negotiations." Further he stated that the Soviet Union recognized that there will always be means of improving the system in the future and that is why they adopted the article providing that the mechanism of detection and identification of nuclear explosions shall be revised every two years. He concluded by saying that the Soviet Union wishes to reach an agreement, "and

that is why we are insisting on the conclusion of a treaty based on the data already agreed between our governments."[70]

Soviet On-Site Inspection Quota Proposal

On July 5[illegible], the Soviet representative introduced a draft article incorporating its views it had put forward on April 27, 1959. It read as follows:

> For the purpose of preventing possible violations by States of their obligations under this treaty, there shall, in addition to the network of control posts, be carried out on-site inspection of unidentified events suspected of being nuclear weapon explosions.
>
> 1. In order to carry out on-site inspection of such unidentified events on the basis of criteria set forth in Article ___, there may be made in each year on the territory of each of the original parties not more than ___ inspections at any place where, according to readings of instruments at control posts, an unidentified event suspected of being a nuclear weapon explosion has occurred.
>
> 2. Inspections under paragraph 1 of this article shall be carried out -
>
> (a) on territories under the jurisdiction or control of the United States or the United Kingdom, at the request of the Soviet Union;
>
> (b) on territories of the Soviet Union, at the request of the United States or the United Kingdom.
>
> Inspection groups within the specified quota shall be despatched by the Commission without delay, and agreement between the original parties to the treaty shall not be required.[71]

No further action was taken on this Soviet proposal during this period.

Staffing Proposals

Discussion of the problem of the Soviet veto over staffing continued, and the Soviet representative clarified

the Soviet position in reference to the veto, when on June 16th he said, "it would depend to a considerable degree on the kind of agreement we reach on the staffing of control posts."[72]

United States introduces new proposal. At the June 22nd meeting, the United States representative stated that the United States was prepared to consider any proposal the Soviet Union might make for the inclusion of a strictly limited number of host country personnel in the staffs of control posts, "perhaps one operator for each of the four principal methods would be reasonable."[73]

The Soviet representative rejected this proposal because it would still make the majority of the technical staff on a control posts foreigners. He added that, in an effort to reach agreement on this question, the Soviet Union was prepared to increase the number of foreign specialists in its proposal, to six or seven at each control post.[74]

United Kingdom submits new Western proposal. On July 20th at the 113th meeting, the representative from the United Kingdom introduced a new Western proposal on staffing of control posts. He said, "the Western delegations are prepared to settle the question of technical staffing at control posts in the territories of the original parties on the basis of an equal division among the three elements involved." By this proposal he said, one-third of the

the Soviet position is reference to the veto, when so that it be said, it would amount to a totalitarian course on the kind of government we have in the exercise of veto power."[70]

United States intervention not required. As the Soviet position, the United States representative argued that the United States and proposed to consider any proposal the Soviet Union might try to use instead of a minimum limited number of Soviet country personnel in the exercise of veto power. "Perhaps one question for each of the five permanent members would be reasonable."[71]

The Soviet representative argued that proposed because it would still mean the majority of the Soviet Union. In addition to [illegible] the Soviet Union [illegible] to increase the number of Russian [illegible] in the Security Council, in order to [illegible] at each [illegible] level power."[72]

United States proposal for further study. The [illegible] United Nations Secretary-General a [illegible] proposed to [illegible] of veto power. He said, "The United States delegation are proposed to settle the question of veto power at [illegible] years in the territories of the United Nations on the basis of an equal division among the five [illegible] involved." By this proposal he said, [illegible] the

personnel would be from the Soviet Union, one-third from the United States and the United Kingdom, and one-third from countries other than the original parties. Further, he said, the head of the control post would be from one of the original parties except the host country.[75]

The United States representative added, in replying to a Soviet question about the third-third, that the only restriction on the third-third would be that they could not come from one of the three original parties.[76]

Soviet Union submits new staffing proposal. On July 24th the Soviet representative said that the Soviet Union was prepared to increase the number of foreign specialists at control posts to ten to agree with the number recommended in the Western proposal for the "other side." He added that the Soviet Union could not accept the use of non-original states for one-third representation on control posts. He said that the non-nuclear States, "are not demanding at all to be included as staff members of control posts situated on the territory of the three nuclear powers." However, he did agree that two or three neutrals could be included in the ten foreign specialists proposed by the Soviet Union.[77]

Although these counter-proposals did narrow the differences, it did not bring about agreement on this question during this period.

Preparatory Commission

On July 27th at the 115th meeting, the United States representative introduced a draft Annex III for the treaty on the functions of the Preparatory Commission. The proposal stated that the preparatory commission will consist of one representative from each of the original parties to the treaty and will come into existence the day after the treaty has been signed by the original parties. The commission will function until the control commission has been established in accordance with the treaty. Further, once certificates of ratification have been deposited by the three original parties, the preparatory commission should be enlarged by adding four other States to be chosen by the original parties from the States that have ratified the treaty. Once the preparatory commission has been enlarged after ratification, the commission should take on the powers of the control commission as specified in the treaty. An executive secretary for the preparatory commission will be appointed by the three original parties and would act in a similar capacity as the administrator once the treaty has been ratified and the preparatory commission was enlarged. The preparatory commission would end when the Conference of Parties met and elected the four non-permanent members of the Commission.[78]

Although there was a great deal of discussion about

the draft Annex III, no decision was taken on it during this period.

Status of the Soviet Veto List

On July 6th at the 107th meeting, the representative from the United Kingdom made a detailed analysis of the present status of the Soviet veto list which had been introduced as an amendment to Article 5 of the treaty on January 30th.[79] He stated that item (a) on amendments had been dropped after adoption of the article on amendments. Item (b) on treaty violations had presumably been dropped after the Soviet representative's statement on June 30th when he said that he was ready to eliminate that item on the understanding that he correctly interpreted the Western position regarding the functions of the control organization. He said he interpreted this as

> the function of the control system and its organs is not to make accusations against States but to bring forward facts, or the scientific evaluation of facts, which might establish whether a clandestine nuclear explosion has taken place somewhere.[80]

Item (c) the representative from the United Kingdom continued, which dealt with the Administrator and his staff, was still unsettled, but it had been agreed that the Administrator should be selected by agreement among the three original parties.[81] Item (d) which dealt with on-site inspections was still unsettled; however, acceptance of

Mid/Atlantic Lines (ETL). No decision was taken on it during this period.

Stages of the Devlin Term Line

On July 22 at the ETM meeting, the recommendations from the Union Pacific made a detailed analysis of the present status of the Devlin term line which had been introduced as an amendment to article 3 of the treaty of January 1924.[70] In stating that item (a) on amendments had been dropped after objections of the unions on remuneration, item (b) on train visibility had previously been dropped after the Trial Arrangements established on June 1st. It was said that to use ready or alternate train on the understanding that be currently experienced the average position regarding the functions of the control separations. As said the independent fill is

> The function of the control system and its system is not to make arrangements against trains but to bring current facts, in the minutiae realization of fact, which might mention whether a circuit-film product explicitly use lines place arrangements.[71]

item (c) the recommendations from the Indian Railways Ministry, which dealt with the Administration and the study was still unofficial, but it had been agreed that the Administration should be entitled by agreement among the three regional unions.[72] Item (d) which dealt with security inspections was still unofficial however, acceptance of

the Soviet quota proposal would settle this item. Item (e) which dealt with revision of control methods and technical problems had apparently been settled with adoption of the amendment article. Item (f) which concerned sites of control posts and special aircraft routes was apparently in agreement that the host country should have a veto over sites and routes but that acceptable alternates should be offered. Item (g) was a general item which dealt with budgetary, financial, and administrative and economic matters, including matters dealing with recruitment and dismissal of auxiliary and support personnel was also apparently in agreement. The Western powers interpreted the Soviet position as seeking a veto for the original parties in the commission as regards the budget as a whole, the scale of contributions, the acceptance of contributions in kind, and loans contracted by the organization. Further, he said, they interpreted that the words "administrative and economic matters" referred to the same items.[82]

Soviet critique of status of the veto list. On July 17th at the 112th meeting, the Soviet representative commented on the representative of the United Kingdom's analysis of the status of the Soviet veto list. He stated that "the position of the Soviet Union is that all basic questions concerning the work of the control organization

the Soviet-Cuban proposal would really pain them. They
had made death with revision of nuclear weapons and bas-
ical problems had apparently been settled with adoption
of the nonaligned article. Item (2) which concerned area
of nuclear free and special security zones was appar-
ently in agreement that the item merely needed more a
word over wires and remove but that acceptable alternative
should be offered. Item (3) was a general item which
dealt with budgetary, financial, and administrative and
economic matters, including matters dealing with security-
made and financial of military and support personnel and
also apparently in agreement. The Soviet people have
pushed the Soviet position as meaning a vote for the
original article in the committee to revise the whole
as a whole, the right of justification, the background of
administration in size, not been interested by the organi-
zation. Further, in fact, they introduced that the more
"administrative and economic matters" related to the same
issue.[37]

Basic outline of Article of the Law [illegible]. In
this is at the time meeting, the Soviet representative
commented on the representation of the United Kingdom's
analysis of the status of the Soviet Law Line. He stated
that "the position of the Soviet Union is that all basic
questions concerning the role of the Security Council

should be settled by agreement between the three nuclear Powers negotiating here at the present time: the Soviet Union, the United States and the United Kingdom. This agreement must either be manifested in the control commission during the operational work of the control organization, or written explicitly into the treaty which we are drafting here." He continued that the analysis was correct in relation to items (a), (b), (d), (e), and (f). As to the two remaining items (c) and (g), he reaffirmed the Soviet position on these items. Under item (c), he agreed with the West that the Administrator should be appointed by the unanimous consent of the three original parties. As to the selection of the staff of all components of the control organization, the Soviet Union was willing to drop its veto if the staff of the organization was distributed according to quotas or to some kind of proportional percentage. In relation to item (g) which concerned budgetary, financial, administrative and economic matters, he declared, that the Soviet Union is ready to eliminate from this item matters relating to the recruitment and dismissal of the supporting and auxiliary personnel if the treaty lays down that they shall be nationals of the country on whose territory a control post is located or an inspection group will operate. In regards to matters of financial responsibility, the principal weight of which will be borne by

the original parties to the treaty, he said, they must be settled by agreement between the three original parties to the treaty.[83]

Summary

This period did see a narrowing of the issues separating the negotiators, but it also brought these issues into sharper focus. It also emphasized the major obstacles to reaching an agreement.

On August 11, 1959, at the 122nd meeting, the Conference adopted an amendment to draft Article 3, which dealt with the Control Organization, providing for the location of the headquarters of the control organization to be located at Vienna, Austria.[84]

On August 26th after the 127th meeting, the Conference recessed to enable the delegations to take part in the forthcoming Fourteenth General Assembly meeting of the United Nations, and it was agreed to resume negotiations on October 12, 1959.

VI. THE FIFTH PERIOD OCTOBER 27, 1959 - DECEMBER 19, 1959

Introduction

On October 27, 1959, the Conference reconvened following a recess from August 26th. Twenty-three formal

the original petition to the trustee, he said, they must be settled by agreement between the three original parties to the trust.[51]

Dangers

This petition did not a matter-of-fact of the issues involved the beneficiaries, but it also brought their issue into sharper focus. It also mobilized the major companies to planning an appeaance.

On August 31, 1970, at the final meeting, the conference adopted an amendment to their constitution to deal with the critical inequalities, including the non-inclusion of the beneficiaries of the pension organization to be located in Atlanta, Georgia.[52]

On August 20th after the 1970 meeting, the Conference changed to admit the Brigadiers in Jean Paul in the Professional Insurance Company (PIC), member of the United Fellows, and it was voted to grant a power negotiation on October 12, 1970.

VI. THE 1973 TRUCK CONVENTION 17, 1973 - October 20, 1973

Preliminaries

On August 17, 1973, the Conference (Teamsters) initiated a convention from August 13th. Twenty-three thousand

meetings were held during this period until the Conference recessed for the holidays on December 19th. The major topics discussed were: the establishment of and report of the Technical Working Group II; functions of the commission and the administrator; the Soviet package proposal; and the adoption of the draft annex on the preparatory commission.

Technical Working Group II

At the 128th meeting on October 27, the United States representative placed the failure of the Conference to reach agreement on the issue of effective control. He stated,

> in particular we want to know how we can gain assurance as to the reliability of methods for the detection and identification of disturbances below the earth's surface so as to determine which are natural seismic events and which may be nuclear explosions.

He continued, "no party to the treaty can be allowed to have a veto over the operation of the machinery, because this would vitiate the chances of effective control." The United States representative then set forth what the United States believes are at least three requirements for effective control:

> 1. The system of control must be capable of detecting nuclear explosions prohibited by the treaty.
> 2. All events which cannot be identified as natural by the system must be eligible for

meetings were held during this period until the conference convened for the initiative on December 1964. The major topics discussed were: the establishment of and report of the Technical Working Group III; Functions of the commission and the administration; the Trial package proposal; and the adoption of the Joint Rules and the preparatory commission.

Technical Working Group II

At the 1964 meeting in Geneva II, the United States representatives stated the failure of the Conference to reach agreement on the issue of effective control. In stated:

> In particular we wish to make this or any other statement as to the feasibility of verifying the obligations not Nuclearization or disarmament below the merit's method is to be determined which are material matters and which may be subject application.

In conclusion, the party to the treaty that be at fault in have a veto over the operation of the machinery. Because this would vitiate the essence of effective control. The United States representatives have not stated why the United States believe matters as least three requirements in effective control:

> 1. The system of control must be capable of assuring nuclear explosions prohibited by the treaty.
> 2. All events which cannot be identified as natural by the system must be eligible for

inspection even though all unidentified events will not in fact be inspected.

3. The number of inspections must be related to the number of unidentified events. The inspection bridge, must vary in length with the gap between events detected and events identified.

He concluded his remarks by putting forward another appeal to the Soviet Union to agree to full exploration of all the available technical information and studies, and of their implications for the effectiveness of the control system.[85]

Soviet reaction. The initial Soviet reaction was a renewed appeal for acceptance of its quota system of inspection based on a small previously agreed number.

On October 29th, the Soviet representative stated in reference to effective control "that you can never reach the absolute point where each and every explosion under any conditions can be detected." He went on to say that "this means that there has to be some kind of political agreement here on the cessation of tests." Further, he said, that the proper place to review new data was by the preparatory commission and the control organization which would be established after the treaty was signed.[86]

However, after extended discussion, the Soviet Union finally did agree to convene a technical working group at the 137th meeting on November 29, 1959. The term of reference agreed upon for the technical working group was:

Deployment even taking all indeterminate events will not in fact be implemented.

3. The number of implementations must be related to the number of calculated events. The interpretive burden must vary in length with the gap between events described and events identified.

He concluded his remarks by pointing forward another appeal to the Soviet Union to agree to full mobilization of all the available technical information and resources, and of their implications for the effectiveness of the monitoring system.[24]

Senior reaction. The initial initial reaction was a renewed appeal for acceptance of the opens system of inspection based on a small particularly agreed number.

In October 1976, the Soviet representative stated in reference to attacking claims that "on the other hand the effective yield which such and every inspection under any conditions can be material." It was not so may that "this means that there has to be some risk of political agreement here on the interpretation of tests." Perhaps, he said, that the proper place to review the data was by the preliminary consultation and the special stipulations which could be established after the treaty was signed.[25]

However, after extended discussion, the Soviet Union finally did agree to endorse a technical working group at the 1977 meeting (December 20, 1976). The task of reference agreed upon for the technical working group was:

> The Technical Working Group of experts shall consider the question of the use of objective instrument readings in connection with the selection of an event which cannot be identified by the international control organ and which could be suspected of being a nuclear explosion, in order to determine a basis for initiating on-site inspections. As part of their work, the experts, proceeding from the discussions and the conclusions of the Geneva Conference of Experts, shall consider all data and studies relevant to the detection and identification of seismic events and shall consider possible improvements of the techniques and instrumentation.
>
> The Group will meet in Geneva on 25 November and report to the conference by 11 December 1959.[87]

Report of the Technical Working Group II. On December 19, 1959, at the 150th meeting, the Group submitted its report to the Conference. Their report stated that there was "disagreement regarding the interpretation of the new data from the Hardtack experiments and regarding the question of de-coupling." Agreement was reached on possible improvements of technique and instrumentation. There was also disagreement concerning the objective instrument readings in connection with the selection of an event which cannot be identified by the international control organ and which could be suspected of being nuclear explosion, in order to determine a basis for initiating on-site inspections.[88]

The Soviet representative of the Technical Working Group II read a long statement to explain the Soviet position in the disagreement over the new data from the Hardtack experiments and the question of decoupling which

were submitted by the United States. He downgraded the reliability of the data and concluded that after extensive analysis of the data and supporting evidence, that it did not change the conclusions reached by the 1958 Geneva Conference of Experts and had, in fact, supported them. Further, he declared, it showed that there were less unidentified events than the Conference of Experts had estimated. He concluded that because of this disagreement over the new data submitted by the United States, the Group was unable to reach agreement over the criteria to be used for the selection of an unidentified event for on-site inspection.[89]

The United States representative rebutted the statement of the Soviet representative and defended the United States argument that the use of the first motion for identification of an underground nuclear explosion was not as reliable as the Conference of Experts of 1958 had concluded and the Soviet experts still contended was true and supported by the United States data. He further defended the United States conclusion that there would be about 15,000 earthquakes of 1 kiloton or more per year and about 2,000 of about 20 kilotons. On the matter of criteria he said, "that the Soviet proposal would have classified such events as the recent United States underground nuclear test explosions, which ranged up to 19 kilotons in yield,

were admitted by the United States. We questioned the reliability of the data and concluded that after extensive analysis of the data was acceptably reliable, that it did not change the conclusions reached by the IAEA Inquiry Commission of Experts and that, in fact, supported them. Further, we noticed, it appears that there were less unjustified events than the Commission of Experts had assessed. We mentioned that because of such discrepancies over the data analyzed by the United States, the Group was unable to reach agreement over the advisability to be used for the application of an international cross for safeguards inspection.[6]

The United States representatives informed the statement of the Soviet representative and declared that United States argument that the use of low flux neutron fluorimetrics of an underground nuclear explosion was not as reliable as the Commission of Experts of 1972 and somewhat not its Soviet experts still considered was true and supported by the United States delegation. The Soviet delegation the United States contention that there would be about 12,000 seismograms of 1 million or more per year and about 3,000 of about 10 kilotons. On the basis of reliability as data, that the Soviet proposal would have alternative sites events as the United States delegation contended, with two locations, which would cost 15-18 million in total.

as natural earthquakes." He concluded his statement by saying that

> the problem of formulation of criteria is a strictly technical problem. If technical knowledge permits one to identify a large fraction of seismic events as earthquakes, then it is clearly an advantage to the control system. If technical knowledge does not permit this, then seismic events must remain eligible for inspection. Determination of the means of selecting events to be inspected must be left for further consideration of the Conference.[90]

Thus the long-awaited technical study of the control problem which was so actively pushed by the West ended without agreement and instead of solving the problem on technical grounds, it put it back in the hands of the Conference to try to reach a political settlement.

Functions of the Control Commission and the Administrator. The discussion also revolved around draft articles VI, on the functions of the control commission, and IX on the functions of the Administrator and his staff. These articles had been proposed by the United States on December 15, 1959, and revised on July 1, 1959.[91]

On December 1, 1959, the Soviet representative submitted an amended proposal for draft article VI on the functions of the Commission. This proposal provided for, the appointment of two deputy administrators in addition to the administrator, one from each side, and they and the administrator would be appointed by the Commission by a majority vote including the affirmative votes of the

three original parties; decisions of the Commission on the location of elements of the System and on the determination of specific routes of special aircraft flights for the collection of air samples shall be taken with the agreement of the government concerned; the commission in accordance with "Article ___" shall instruct the Administrator as to the dispatch of inspection teams for the verification of events suspected of being nuclear explosions; and the Commission shall establish procedures in accordance with "Article ___" for the surveillance and observation of nuclear detonations for peaceful purposes.[92]

At the 142nd meeting on December 3, the Soviet representative introduced an amended proposal for Article IX on the functions of the Administrator and his staff. The proposal set forth that: the Administrator shall be responsible to the Commission and is directly subordinated to it in all his acts; the Deputy Administrators appointed under Article VI would assist the Administrator in his day-to-day work and they shall be entitled to equally participate in questions for decision by the Administrator; the Administrator is authorized to develop research programs and make recommendations to the Commission for improvement of the system; and authorizes the Administrator, upon instruction and under procedures approved by the Commission, to take the necessary steps to

three original partisan decisions of the Commission on the
implication of elements of the Syrian and on the determina-
tion of specific areas of economic activity affecting the
the maintenance of air service shall be taken with the
agreement of the government concerned; the commission is
accordingly more reliable __" equal footing the Judicia-
ries so to the dispute of independent means for the con-
tinuation of treaty mandated of being another supplement
and the Commission will certainly proceedings in accord-
ance with Article __" the the activities and discre-
tion of national territories for peaceful purposes.[2]

At the final meeting on December 1, the Soviet
representative introduced an amended proposal for Article
IX on the functions of the Administrator and his staff.
The proposal set forth that: the Administrator shall be
responsible to the Commission and is directly subordi-
nated to it in all its acts; the Deputy Administrators
appointed under Article VI should assist the Administrator
in his day-to-day work and they shall be selected on
equally participate in questions for decision by the
Administrator; the Administrator is authorized to develop
research programs and make recommendations to the Commi-
ssion for Government of the private and technical the
Administrator, those instructions and make proposals
approved by the Commission, in this the necessary steps to

dispatch inspection teams and to carry out special aircraft flights in accordance with Annex I (the detection and identification system).[93]

Western reaction. On December 4th, the United States representative made a preliminary review of the Soviet proposals. He said his general reaction was that the proposals change quite drastically the initial Western proposals. In relation to the functions of the Administrator, he commented that

> it seeks to place the administrator in the rather menial position of a person closely akin to a servant of the control commission who could act solely to carry out a constant flow of directives which it seems would be issued by the commission on a day-to-day basis.

He added that the United States feels that this administrator "must be given a certain amount of latitude in carrying out his vital functions, and that is why we have given him separate terms of reference in Article IX." He continued,

> we do not deny, nor shall we, that the control commission will occupy the predominant place in the organization, but we do not feel that the supervisory functions exercised by the control commission require that the administrator be held in such close daily check.

In regards to the need for the two deputies, he said, "he strongly questions the need to put the appointment of the two deputies into the treaty." On the question of special aircraft flights, he said that "we do not think that

disparate interpretations and to carry out general war-
ranted rights in accordance with Annex 2 (the Convention
and Identification system).[77]

Berlin Precision. Furthermore, the Soviet Union
representative made a particularly review of the Berlin
proposals. He said the general assumption was that the pro-
posals above quite correctly the initial measure pro-
posals. In relation to the Problems on the Administrative,
he commented that

> It seems to place the administration in the rather
> unfair position of a person already with to a service
> of the control mechanism who merely not solely to
> carry out a routine flow of directives which it
> seems would be issued by the commission on a day-to-
> day basis.

He added that the United States felt that this administra-
tive Part be given a central method of initiate in
analyzing the first Problem, and that is why we have
given the regards Berne of reference in Article III - the
Problem.

> We do not feel, he shall say, that the method com-
> mission will Occupy the Responsible place in the
> organization, but we do not feel that the supervisory
> functions assigned by the United Nations Principle-
> that the administrator is held in such close Affi-
> ciency.

In regards to the same for the two regulations, he said, "In
actually questions the need to put the Agreement of the
two Parties into the treaty." On the question of special
aircraft flights, he said that "we do not think that

matters of on-site inspections and special flights should be treated together." Further, the administrator should handle the dispatch of aircraft flights without separate and specific control commission action, through procedures set up by the Control Commission.[94]

Soviet Union modifies proposal on function of the Commission. On December 10th at the 146th meeting, the Soviet representative amended its proposal on the selection of sites and aircraft flights which were to be taken with the agreement of the government concerned to read:

> The Commission shall decide on the location of elements of the System and on the determination of definite flight patterns for special air sampling flights. Before so deciding, the Commission shall agree upon the location of elements of the System or upon the flight pattern for the special flight with the government of the country concerned, which shall have an opportunity either to approve the proposal of the Commission for such location or flight pattern or to propose another location or flight pattern satisfying the scientific and technical requirements.[95]

The United States representative commenting on this amendment of the functions of the control commission, repeated his previous request that the question of special aircraft flights should be treated separately from the location of control posts.

Agreement on certain paragraphs of articles VI and IX. On December 11th at the 147th meeting, the Conference provisionally approved certain paragraphs of draft articles VI and IX on the functions of the Commission and the

matters of security interests and special flights should be treated together." Further, the Commissioners should basis the dispute of security flights without separate and specific review of existing safeguards, through procedures not so by the Civil Committee."[24]

Joint Union meeting approval on Decision of the Committee. On November 19th at the joint meeting, the Joint representatives unanimously approved the recommendation of allied and aircraft flights which were to be taken with the approval of the government concerned (Italy):

> The Committee shall decide on the designation of alternate of the flights and of the jurisdiction of certain flight patterns for special air-weighing flights. Before so deciding, the Committee shall obtain upon the initiation of Commander of the Group the air flight patterns for the special flights with the possession of the security concerned, which shall have an opportunity to express the flight patterns of the Committee for their information or flight patterns on to provide basis for flights or flight patterns satisfying the security and technical requirements.[25]

The United States representative commenting on this recommendation of the Functions of the Central Committee, expressed the previous remarks that the operation of special aircraft flights should be handled satisfactorily from the location of control towers.

Attempt to certain patterns as allied (i.e. 10). On November 21st at the joint meeting, the Commissioners practically approved multi-engineers of each activities 77 and 12 on the Recommendations of the Committee and the

Administrator. The paragraphs approved were:

Paragraph 1 of Article IX--Functions of the Administrator and his Staff--which read:

> The administrator shall be the chief executive officer of the system and the head of the staff of the control organization. He shall be responsible to the commission and under its supervision shall carry out its policies and directives. He shall have executive responsibility for the installation and operation of the system under procedures and standards established by the commission. He shall provide to the commission such advice, reports and assistance as the commission may request.

Paragraph 5 of Article IX, which read:

> The administrator shall develop and arrange for the execution of a programme of research and development.

Paragraph 9 of Article VI--Functions of the Control Commission--which read:

> The Commission shall establish procedures for the implementation of article ___ on detonations for peaceful purposes.[96]

Soviet Package Proposal

On December 14th at the 148th meeting, the Soviet Union submitted a proposal to settle the four major obstacles to agreement. The Soviet representative stated these were: inspection, staffing of control posts, the composition of the commission, and voting procedures in the commission on budgetary and financial questions. He declared that the Soviet Union was prepared to make major concessions on other issues if the West would accept the

administrators. The participants agreed that:

Paragraph 1 of Article 12--Functions of the Administrator and the Staff--should read:

The administrator shall be the chief executive officer of the system and the head of the staff of the control organization. He shall be responsible to the commission and under its supervision shall carry out its policies and directives. He shall have overall responsibility for the initiation and operation of the system basic procedures and standards established by the commission. He shall provide to the commission such service, reports and assistance as the commission may request.

Paragraph 2 of Article 12, which read:

The administrator shall initiate and arrange for the preparation of a programmed of research and development.

Paragraph 3 of Article 12--Functions of the Control Commission--which read:

The commission shall periodically prescribe the implementation of uniform ___ or criteria for ministerial purposes.??

Xavier Training Proposal

On December 1st at the 1st meeting, the Xavier Union submitted a proposal to revise the first major objective to agreement. The Xavier representative stated that: Independent, auditing of research grants, the responsibility of the commission, and audit procedures in the evaluation to authority and financial questions. He believed that the Xavier focus was proposed to meet major concerns in other areas if the committee would adopt the

Soviet proposal of 3-3-1 composition of the Commission. Specifically, he said that the Soviet Union would be prepared to accept the United States proposal for staffing by thirds, one-third of the specialists made up of the country on whose territory the post was located, one-third of the specialists from the other side and one-third of the specialists from non-nuclear powers. As to the distribution of the last third, he proposed that this be distributed by one-third to countries allied to the Soviet Union, one-third to countries allied to the United States and the United Kingdom, and one-third to neutral States. Further, he said, the Soviet Union would agree to have decisions on an itemized budget made by a two-thirds majority of the Commission, providing that the treaty laid down the share of contributions to be borne by the three original parties to the treaty.[97]

Western Comments on the proposal. The United Kingdom representative asked the Soviet representative whether there was any change in the Soviet position on the nationality of the head of the control post. The Soviet representative replied that he must be a national of the country within which the post is located.[98]

The United States representative only commented that the Soviet proposal of 3-3-1 composition of the control commission would make the two-thirds vote on the budget an

"academic question" because if one side disagrees with the budget, then that is an automatic veto, "since three from seven leave four." Further, he said, in reference to contributions that he interpreted this to mean it would be written as a percentage rather than a flat sum.[99]

There was no further discussion on this proposal during this period.

Draft Annex on the Preparatory Commission

On November 30th at the 140th meeting, the conference adopted the draft annex III submitted by the United States on July 27, 1959, without any major modifications.[100] Annex III set forth the composition and functions of the preparatory commission.

Summary

During this period very little progress was made towards reaching agreement. The failure of the Technical Working Group II to reach agreement on criteria for selecting an event for on-site inspections impeded the progress of the Conference. Although there was agreement on certain paragraphs of the articles in relation to the functions of the Commission and the Administrator, there still remained many elements of disagreement in these articles. The adoption of Annex III on the preparatory commission did progress the Conference somewhat. However, with the adoption of articles and annexes on which there

was little or no disagreement, it narrowed the remaining issues down to fundamental principles on which there was not much agreement since the negotiations began.

The Conference recessed on December 15 for the holidays to be reconvened on January 12, 1960.

VII. THE SIXTH PERIOD JANUARY 12, 1960 - APRIL 14, 1960

Introduction

The sixth period commenced in Geneva when the Conference reconvened on January 12, 1960. Forty-eight meetings were held until the Conference again recessed for Easter on April 14, 1960. Discussion during these meetings revolved around the technical system, the United States proposal for a phased treaty, inspection criteria, seismic research program, and special aircraft sampling flights.

Dispute over the Technical System

At the opening meeting on January 12th, the United States representative concentrated his remarks to discussion of the technical system. He said that the Conference had been confronted with two different catagories of issues: one technical and the other political. He continued that for the past year the Conference had concentrated its attention on the political issues and a great amount of progress had been made. He added that in the

the little or no disagreement, it resolved the conflicts lasted four or five hours and ended with the Soviet side and their agreement since the negotiations began.

The Conference recessed on December 14 for the holidays to be reconvened on January 12, 1972.

VII. THE SIXTH PARIS SESSION (JANUARY 12, 1972 - APRIL 14, 1972)

Introduction

The sixth period commenced in Paris when the Conference reconvened on January 12, 1972. Twenty-eight meetings were held until the conference again recessed for Easter on April 14, 1972. Discussion during these meetings revolved around the technical systems, the major proposal for a phased treaty, inspection criteria, subject research programs, and general strategic weapons limitations.

Debate over the Technical Issues

At the opening meeting on January 12, the Soviet Union representative reminded the delegations of disagreement of the technical systems. He said that the conference had been confronted with two different subjects to be treated: one technical and the other political. He mentioned that for the past year the conference had concentrated its attention on the political issues and a great amount of progress had been made. He noted that in the

area of the technical system there has developed a real impasse. Further, he said that United States scientists could no longer accept the conclusion of the 1958 Conference of Experts to the effect "that 90 percent of all seismic events above an equivalent yield of 3 kilotons could be identified by the technique of using the sign of the first motion." The United States scientists he said, concluded "that the number of seismic events of various equivalent yield ranges with which the control system will have to deal on a worldwide basis is 50 to 100 percent larger than appeared to be the case at the 1958 Geneva Conference of Experts." He added, however,

> that the number of events is not in itself crucial for our work. Our problem is to find some means of sifting through the maze of seismic events to identify as many as possible as earthquakes, so that only a residue will remain unidentified and hence subject to suspicion as possible nuclear explosions.

He continued that the device for achieving some measure of identification has been called either "objective instrument readings" or "criteria" and the failure of the Technical Working Group II to reach agreement in this respect "threatens to have the most discouraging consequences for the completion of our work here." He concluded by saying

> a Treaty which purports to control a prohibition on all underground nuclear weapon tests must rest on a basis of agreement regarding criteria or objective instrument readings. It must establish agreed and effective procedures for determining

> when on-site inspections should be initiated and how they should be carried out.[101]

Soviet Proposal on the Technical Problem. On January 13 at the 152nd meeting, the Soviet representative put forth a proposal as a means out of the technical system impasse. He proposed that the control commission, which is the main supervising organ of the control organization, will have the opportunity of organizing further research aimed at increasing the effectiveness of the methods of identification and of the sensitivity of the instruments and equipment. He continued that

> the Control Commission could also be entrusted with the further study of controversial scientific technological questions on which agreement has not yet been reached between our experts and on which the views of the United States and Soviet experts differ.

As far as relating inspections to unidentified events, the Soviet representative stated "that there should be inspections, that they should be carried out," but the question must be solved politically because a technical approach would lead us to a deadlock. He further commented that

> the difficulties over criteria are artificially created owing to the differences of approach in this matter. If we reach an agreement on a quota of inspections then, of course, no special difficulties will arise in our negotiations on the question of criteria. We shall quickly be able to find the approach, or define the criteria, which will have to be used in order that each of the sides may carry out the agreed inspection quotas.[102]

United States Proposal for a Phased Treaty

On February 11, 1960, at the 170th meeting, the

when co-site interceptions should be initiated and how they should be carried out.[77]

Soviet proposal on the technical problem. On January 13 at the 12th meeting, the Soviet representative put forth a proposal as a means out of the technical system impasse. He proposed that the control commission, which is the main co-ordinating organ of the central organization, will have the opportunity of supplying further research aimed at increasing the effectiveness of the methods of identification and of the sensitivity of the instruments and equipment. He continued that

> The United Nations would also be concerned with the further study of scientific seismological problems which have not yet been resolved because we regards and on which the views of the United States and Soviet experts differ.

As far as raising improvements in seismological events, the Soviet representative stated "this also could be improved, but they should be carried out," but the question must be solved jointly between a technical approach which lead to a deadlock. He further recommended that

> the difficulties over criteria are artificially created owing to the differences of approach in this matter. It is risky to approach on a basis of inspection then, of course, no special difficulties will arise in our negotiations on the question of criteria. We shall quickly be able to find the approach, to define the criteria, which will have to be used in order that each of the sides may carry out the agreed inspection quotas.[78]

United States proposal for a Second Series

On February 11, 1961, at the 17th meeting, the

United States representative introduced a new phased treaty proposal. He proposed a phased agreement on the cessation of nuclear tests:

> the first phase of the agreement should provide for the cessation of all nuclear weapon tests in the earths atmosphere, in the oceans, and in outer space up to the greatest height with respect to which agreement can be reached on the installation of effective control.

This phase would also include provision for the cessation of underground nuclear tests down to the "lowest limit of size, or threshold," for which adequate control is now feasible. This "threshold" would be defined in terms of the magnitude of seismic events detected by the control system. He said,

> there would be a direct relationship between the number of on-site inspections of detected but unidentified seismic events of magnitudes greater than the threshold magnitude and the number of such events which occur.

Therefore, he continued,

> within the limits of the technical capability of the agreed control system, the selection of the threshold will depend upon the level of inspection acceptable to the three original parties.

He further stated that the treaty would provide for the evolutionary and progressive lowering of the threshold magnitude as the detection and identification capabilities of the system were improved through the utilization of improved techniques, instrumentation, and criteria.

Taylor Fisher representatives introduced a new planned

energy program. He presented a planned approach on the

research of nuclear energy:

> The first phase of the programme plans for the generation of all nuclear energy by the earth stations, in the oceans, and in space up to the planned height with respect to which government can be reached on the installation of effective energy.

This phase would also include promoting the operation

of nuclear-powered satellite bases down on the "lunar light or

alpha, or dark-side," for which adequate shielding is now

feasible. This "moonscape" would be defined in terms of

the magnitude of natural events controlled by the natural

system. He said,

> There would be a direct relationship between the number of no-site launchings of defined but satisfactorily automatic events or acceptable creative than the threshold magnitude and the number of such events which occur.

Therefore, he continued,

> within the limits of the nonnuclear capability of the ground control system, the activities of the spacecraft will depend upon the level of temperature exploration in the three orbital parking.

He further stated that the energy needed provide for the

evolutionary and programmatic impacting of the nonnuclear

requirements as the economical and identifiable capabilities

of the system were achieved through the utilization of

improved technologies, instrumentation, and activity.

Further, he proposed that a program of joint research be instituted as rapidly as can be agreed upon. As for criteria, he proposed that the criteria proposed by the experts of the United States at the Technical Working Group II be used as an initial criteria. He continued that, if this was not agreeable, then "the agreed level of inspection be expressed simply as a percentage of all seismic events above the agreed threshold magnitude which are located by the system." He added that the question of whether the level of inspection should be expressed as a percentage or expressed as a fixed numerical quota "is of secondary importance." The primary consideration, he said, is that the level of inspection must bear a relationship to the scientific facts. Specifically, the United States representative proposed the adoption of a threshold of magnitude 4.75. Thus, he continued,

> depending on whether we are able to reach agreement on criteria, either all seismic events of magnitude greater than 4.75 located by the system would be eligible for inspection or, alternatively, only those events above such magnitude left unidentified after the application of the United States criteria would be eligible for inspection. In the former case, we would propose that 20 percent of all events located by the system would be subject to inspection; in the latter case we would propose that 30 percent of unidentified events be inspected. On the basis of the best estimates provided by United States scientists, and assuming the existence of control posts initially only on the territories of the three original parties, it would appear that either formula applied to events of magnitude 4.75 or greater would result in about twenty inspections in the Soviet Union in the average year.[103]

Later in the discussions in answer to a Soviet question in regards to tests below the threshold, he stated "that tests in the underground environment lower than the seismic magnitude of 4.75 would be excluded from the first phase of the proposal and that there would be no moratorium on these tests in the treaty."[104]

Soviet Reaction to the proposal. The initial Soviet reaction was that the proposal did not require the control system that was recommended by the Conference of Experts in 1958 because the present national systems can detect explosions above 4.75 magnitude in all environments. He stated later that "if the United States proposal is adopted it will preserve and even legalize the possibility of continuing the nuclear arms race, of improving various types of nuclear weapons by underground testing."[105]

Soviet Union Proposes Temporary Criteria

As a means out of the impasse over technical criteria, the Soviet representative at the 172nd meeting on February 16th introduced a proposal on "temporary criteria." The "temporary criteria" he proposed was:

> 1. An event may be regarded as suspicious and subject to inspection only if it is located according to the data of several surrounding control posts within an area up to approximately 200 square kilometres, in accordance with the recommendations of the 1958 experts' report.
> 2. A located seismic event shall be ineligible for inspection if, and only if, it fulfills one or more of the following criteria:

[illegible] later in the discussions in answer to a Senate question in regards to tests being the Kiwanatoa, the stated "Not tests in the underground environment than the maximum magnitude of 4.75 would be anticipated from the first phase of the proposal and that there would be no measurable or there there in the crust."[19]

Israel Dangoor in his response, the Dalhousie Dalhousie was find the proposal did not consider the cultural aspects that was recommended by the Government of Canada in 1972 because the present nuclear system was delivery capabilities above 4.75 magnitude in all environments. In stated large mass "for the nuclear strike proposal is aimed to be well prepared and even improve the possibility of destroying the nuclear force case, of retaliatory weapons types of nuclear weapons by underground testing."[20]

Doctor Ralph Freeman Temporary Citizenship

As a means and of the Imperial war contrabal mis-tacia, the Doctor appreciatively in the 17th meeting on February 1st introduced a proposal on "temporary citizenship." The "temporary citizenship" the proposed was:

1. An event may be regarded as revolution and subject to intervention only if it is located sufficiently be the date of lawful warrantly contract place within an area up to approximately 300 square miles, in accordance with the recommendations of the UNO nuclear report.

2. A lawful nuclear event shall be "Dalhousie for the Dangerous is, but only if, it fulfills one or more of the following criteria:

> (a) its depth of focus is established as below 60 kilometres;
>
> (b) its epicentral location is established to be in the deep ocean and the event is unaccompanied by a hydroacoustic signal consistent with the seismic epicentre and origin time;
>
> (c) it is established within 48 hours to be a foreshock by the occurrance /sic/ of a larger event within the accuracy of the determination of the two epicentre;
>
> (d) it is established to be an aftershock of a seismic event of at least magnitude 6 which has been clearly identified as an earthquake by the criteria of sub-paragraphs (a) and (b) above.
>
> 3. The basic data for all criteria will be obtained from the control posts, supplementary data not involved in determining the eligibility of a particular event for inspection may be derived from national stations.

The Soviet representative continued that the Soviet Union would agree to the dispatch of inspection teams during the initial period of the operation of the control organization within quotas agreed upon on the basis of the above criteria. He added further,

> the scientists of the Soviet Union and the Western Powers would continue the joint study of the question of criteria so as to eliminate any existing difference of opinion and work out and agree upon a complete set of scientifically based criteria which would replace the simplified temporary criteria.[106]

At the 173rd meeting, in answer to Western questions in relation to the proposal, the Soviet representative said, "the joint research program would be stipulated in the treaty and would begin as stipulated in the treaty." He added that the program should not need or use nuclear explosions.[107]

Western critique of Soviet criteria proposal. At the 180th meeting, the United States representative presented his formal critique of the Soviet temporary criteria proposal. He stated that the United States considers the criteria generally acceptable technically, with qualifications. The qualifications he put forth were:

> (1) It will be necessary to reach a satisfactory understanding that if progress in research does not lead to agreement on improved criteria by the end of the initial treaty phase the use of the criteria adopted by this Conference will continue, or some alternative arrangement will be made to ensure that the control organization will not be left without criteria.
>
> (2) 200 square kilometres is too small an area to use as the area of uncertainty in locating a seismic event with the control system. The U.S. position is that the area eligible for inspection consists of that 500 square kilometres which has the highest likelihood of containing the epicentre. When adequately precise regional technical improvements in the system have been developed the area eligible for inspection will be 200 square kilometres which has the highest likelihood of containing the epicentre.
>
> (3) The larger event which follows the foreshock must itself be clearly identified as an earthquake.[108]

The problem of criteria was not solved in this period, but the differences between the two positions was not too large and appeared to be negotiable.

Soviet Phased Treaty and Moratorium

On March 19, 1960, at the 188th meeting, the Soviet Union submitted its own proposal on a phased treaty. The proposal stated that the Soviet Government was willing to reach agreement on the basis of the following:

Western military of Soviet military research.

The 1970s meeting, the United States representative pro-
posed the Soviet counterpart of the Soviet temporary military
proposal. He stated that the United States recognizes the
critical geostrategic importance, militarily, with qualifica-
tions. The qualifications he put forth were:

(a) It will be necessary to remain a nonexpiry
understanding that if progress in research does not
lead to agreement a lapsed criterion by the end
of the initial twenty years the use of the criteria
adopted by this conference will expiration, or some
alternative arrangement will be made to assure that
the nuclear correlation will not be left without
criteria.

(b) 200 square kilometers is too small an area
to act as the area of concentration in locating a
suitable ground site for control systems. The U.S.
position is that the area eligible for inspection
centers or some 400 square kilometers within the
the bigger limitation of constraining the epicentre.
When adequately practice negotiation equivalent improve-
ments in the system have been developed the area
eligible for inspection will be 400 square kilo-
metres which has the highest likelihood of contain-
ing the epicentre.

(c) The larger event which triggers the threshold
must itself be clearly identified as an earthquake.[18]

The problem of verification was not solved in this
period, but the differences between the two positions was
not too large and appeared to be negotiable.

Soviet formal proposal

On March 17, 1980, at the 1980 meeting, the Soviet
Union submitted its own proposal on a phased treaty. The
proposal stated that the Soviet Government was willing to
reach agreement on the basis of the following:

> To conclude a treaty on the cessation of all nuclear weapon tests in the atmosphere, in the oceans and in outer space, and of all underground tests which produce seismic oscillations of magnitude 4.75 conventional units or above.
>
> In regard to unidentified underground events producing seismic oscillations below magnitude 4.75 conventional units, which according to the United States contention do not lend themselves to control, the Soviet Government is prepared to agree to the United States proposal to institute a programme of joint research and experiments by the Soviet Union, the United States and the United Kingdom, on the understanding that all parties to the treaty assume at the same time the obligation not to carry out during that period any nuclear weapon tests producing seismic oscillations of magnitude 4.75 conventional units or below.[109]

In answer to several questions put forth by the Western representatives, the Soviet representative stated that the joint research program would begin after the treaty was signed, and that the agreement not to test below a threshold of 4.75 magnitude should be a part of the treaty.[110]

On March 21, he further added that the drafting of the joint research program would be done by the preparatory commission and would last for four or five years. As to the moratorium, if no agreement was reached after four or five years on a criteria, he said, this would not release the parties to the treaty of their obligations. He reaffirmed the Soviet position that the question of inspection quotas must be solved as a political question and the Soviet contention that nuclear explosions were not necessary for the research program. He also stated that

inspections within the limits of the agreed quota could be made for incidents below or above the threshold.[111]

West Conditionally Accepts Soviet Phased Treaty and Moratorium Proposal

On March 31, 1960, the Western representatives introduced the joint declaration of President Eisenhower and Prime Minister Macmillan which was released on March 29.[112]

The United States representative, in commenting on the communique, stated that the essence of the "United States-United Kingdom communique is the decision that those Governments are agreeing to a common approach with the Soviet Union on the over-all framework of this treaty." He further pointed out

> that as soon as our treaty has been signed and arrangements have been made for a coordinated research programme designed progressively to improve the means of control for seismic events below a magnitude of 4.75, the two Western Governments will be prepared to put into effect a voluntary moratorium of agreed duration on nuclear weapon tests below that threshold. This would be accomplished by a unilateral declaration which would be made by each of the three Powers.

He continued that the communique "invited the Soviet Government to join at once with their Governments in making arrangements for establishing and putting into operation such a coordinated research program." The United States representative set forth the Western views in relation to several other points put forward in the Soviet phased

Inspection until the limits of the given data could be made for instances below or above the threshold.[11]

Best Qualitatively Improve Daylan Tested Treaty and Negotiation Process

On March 31, 2000, the Western representatives introduced the joint declaration of Freelands Clearwater and Vidma Minister Hamalian which was released on March 23.[12]

The United States representatives, in commenting on the commonly shared view of the "United States-United Kingdom commonlaw" in the declaration that these documents are consulting in a common accordance with the Daylan Talks on the overall framework of this treaty,[13] the Eastern pointed out

> that so much as our treaty has been signed and ratifications have been made for a constitutional amendment provisions designed principally to improve the basis of security for nuclear weapon bases below a magnitude of 4.75, the Western Governments will be prepared to put Lazor affairs a voluntary moratorium of agreed Tuesday on nuclear testing beyond below high threshold. This would be supplemented by a mutuallyed monitoring which would be made by each of the three powers.

The statement that the commonlaw "limited the Daylan Treaty back to just as some with their negotiations in making accompanying for authorizing and passing this treaty, that a constitutional amendment problem." The United States representatives are doubt the Eastern claim in calculation to account other nuclear yet tested in the Daylan phases.

treaty proposal. First, that the Western Powers considered four or five year moratorium as "excessive." Second, the moratorium should not be included in the treaty. Third, that the West felt that nuclear detonations would be necessary as part of the research program.[113]

On April 6th at the 194th meeting, the United States representative in replying to several questions asked by the Soviet representative made the following comments in reference to the United Kingdom-United States joint declaration of March 29.

In answer to several questions about the research program, he said,

> our three governments will have to agree on whatever coordinated research programme is adopted by us. Further, it is expected that scientists from the three powers would on a full reciprocity basis be able to observe and cooperate on any research program that have already been started.

Thus the United States considered national research programs which would be coordinated between the three powers.

On questions relating to nuclear detonations for research purposes he said,

> the United States is convinced that a limited number of nuclear explosions is an essential element of a vigorous seismic research programme. There is no question in our minds but that the best way to learn how to discriminate between nuclear explosions and earthquakes is to use nuclear explosions directly in the research programme.

In answer to questions relating to the moratorium he said, "the moratorium would come into effect when the

treaty is signed and agreement has been reached on a program of coordinated research." He added that the moratorium could come into effect before the treaty is signed if a program of coordinated research is agreed upon. The reason for the Western proposal that the moratorium not be included in the treaty was explained as a United States policy to embody in a treaty only those obligations in fields related to disarmament whose fulfillment can be adequately verified. In relation to the length of the moratorium, he referred to a previous statement he made which said, "the exact terms of this moratorium will be developed as plans are worked out for a coordinated research program and in the light of progress towards an adequately safeguarded threshold treaty." As to what would happen if no agreement is reached when the moratorium ends he said that it would end, "otherwise it would be a misnomer to call this a moratorium."

United States proposes research study group. On April 12th at the 196th meeting, the United States representative announced that he had given the other delegations a memorandum requesting a meeting of experts to discuss a coordinated research program.

Prior to the recess on April 14, the Soviet representative had tentatively approved the date of May 11 for the experts meeting which had been proposed by the Western representatives.

Special Aircraft Sampling Flights

During this period, there arose a series of discussions over two aspects of special aircraft sampling flights. The first over observers on these flights; and the second, over routes for these flights.

The Conference of Experts of 1958 had agreed in its recommendations that it might be necessary in certain cases to carry out special flights to locate clouds which might contain radioactive debris from a nuclear explosion. They added that the aircraft and crews should be provided by the host country and that, in most cases, the flights would follow routes previously designated.[115]

Observers on Aircraft sampling flights. The discussion stemmed from the Western view that there should be one or more observers on aircraft sampling flights. At the 155th meeting on January 18, the Soviet representative repeated their argument that there should be one observer on these flights. On January 25th at the 159th meeting, the Soviet Union submitted a proposal that there should be an observer from the control organization and one from the host country. On February 4th at the 166th meeting, the Soviet representative proposed that the administrator appoint from two to four staff members of the control system as observers on special flights and that such observers be specialists of the system and "appointed on a parity basis from among the nationals of both sides concerned."[116]

Special Aircraft Sampling Flights

During this period, there arose a series of discussions over the advisability of special aircraft sampling flights. The first was observed in these flights, and the second, free radar for these flights.

The conference of August of 1951 had agreed in its recommendations that it might be necessary in certain cases to carry out special flights to locate atomic debris, cosmic radioactive debris from a nuclear explosion. They noted that the aircraft and crews should be provided by the Air Force Military and that, in most cases, the flights would follow routes previously designated.[112]

Discovery of Airborne Sampling Flights. The discussions stemmed from the Russian view that there should be one or more observers on aircraft sampling flights. At the 1951 meeting on January 12, the Soviet representative repeated their argument that there should be one observer on these flights. In January 1952 at the 1952 meeting, the Soviet Union submitted a proposal that there should be an observer from the medical organization and one from the Meteorological. In February 14 at the 1952 meeting, the Soviet representative proposed that the scientists appointed from two to four staff members of the medical system be observers on special flights and that such observers be specialists of the system and "nominated on a parity basis from among the nationals of both sides respectively."[113]

At the 185th meeting on March 14th, the representative from the United Kingdom introduced a proposal that authorized the administrator to appoint two observers on special sampling flights but allowed the host country to designate a representative to accompany the observers on the flight.[117]

The Soviet representative replied to this proposal that the Soviet Union wanted the host country representative to participate in the control operations on a parity basis. He added further that he considered the United Kingdom proposal a departure from the general principle of staffing.[118] The representative from the United Kingdom replied that aircraft sampling flights were a special case and had to be treated differently.[119]

This is as far as this problem was solved during this period, and it was carried forward to the next period.

Selection of aircraft sampling routes. The question of routes for special aircraft sampling flights was brought into the discussion by a proposal by the representative of the United Kingdom introduced on January 18th. He proposed that

> as soon as the requirement for a flight is known the administrator will propose a flight route to the party or parties concerned. Once the administrator's proposal is made there will be twenty-four hours for the administrator and the parties to agree on this route or an alternative one. Failing such agreement there will be another twenty-four hours

At the 1969 meeting in Rome, the representative from the United Kingdom introduced a proposal that authorized the administration to upgrade the security on special security flights but allowed the host country to designate a representative to accompany the security on the flight.[117]

The Soviet representative replied to this proposal that the Soviet Union wanted the host country representative to participate in the security operations on a parity basis. The United States then be reminded the United Kingdom proposal a departure from the general principle of parity.[118] The representative from the United Kingdom replied that allowing special flights were a special case and had to be treated differently.[119]

This is as far as this problem was solved during this period, and it was revisited however in the next period.

Injection of aircraft carrying weapons. The question of points the special aircraft carrying flights was brought into the discussion by a proposal by the representative of the United Kingdom introduced on January 1969. He proposed that

> If upon the requirement for a flight is taken the administrator will propose a flight route to the party or parties concerned. Then the administrator proposal is made there will be twenty-four hours for the administrator and the parties to agree on this route or an alternative one. Failing such agreement there will be another twenty-four hours

> for the party or parties to satisfy the commission with an alternative route.[120]

The Soviet representative objected to the proposal and referred to the recommendation of the 1958 Conference of Experts that "it is sufficient that flights for the purpose specified should be made along routes laid down in advance."[121]

On February 1st at the 163rd meeting, the Soviet representative outlined the Soviet views on aircraft sampling routes. He stated,

> the aircraft flights must be carried out in a certain way and in accordance with the circumstances and requirements, so that if a nuclear explosion in the atmosphere has really taken place, and if data obtained from other methods confirm this, if its location and yield have been determined, and if by mathematical or other means the route of the movement of a cloud has been worked out through various calculations, taking into account the wind, altitude and so forth, then of course, the route which will be selected for the despatch of the aircraft will have to be such as will traverse that particular area, so that the aircraft can fly through the area and collect samples.[122]

On April 13th at the 197th meeting, the United Kingdom introduced a new proposal to solve the mutual problem of routes of aircraft sampling flights and the controversy over observers. The proposal was a package deal whereby the Western powers would accept the Soviet proposal on permanent routes for sampling flights to be established in accordance with criteria to be established in Annex I on the System, if the Soviet Union would accept the Western

for the party or parties to satisfy the commission with an alternative route.[120]

The Davies representative objected to the proposal and referred to the recommendation of the 1969 Conference of Experts that "it is sufficient that rights for the purpose specified should be made along routes laid down in advance."[121]

In February 1971 at the 121st meeting, the Soviet representative outlined the Soviet views on aircraft hijacking crimes. He stated,

> The aircraft flights must be carried out in a certain way and in accordance with the circumstances and requirements, so that if a medical problem in the atmosphere has really taken place, the is data obtained from other methods confirm this, if the incidents and yield have been determined, and if by mutuality or when means the route of the aircraft and if a client has been needed for foreign relations, taking into account the wind, altitude and so forth, then of course, the route which will be selected for the departure of the aircraft will have to be made as well regardless what particular area, so that the aircraft can fly through the area and collect evidence.[122]

On April 13th at the 123rd meeting, the United Kingdom introduced a draft proposal to solve the mutual problem of change of aircraft, changing flights and the mandatory over distances. The proposal was a revision that already the Western powers could accept the Soviet proposal on permanent change the landing flights to be established in accordance with criteria to be established in terms of the agreed, if the usual value will change the basis

proposal for two observers on aircraft sampling flights not nationals of the country concerned.[123]

The Soviet Union did not reply to this package proposal during this period, and the issue remained unsettled.

Summary

This period had been marked by extensive debate on the technical problems of the system and appeared to be headed for a definite impasse. However, various proposals, the United States phased agreement, and the Soviet Union's phased agreement and moratorium, appeared to show the way out of the deadlock. With the Western conditional acceptance of the phased agreement and a moratorium linked to a research program, chances for agreement improved. Further, most of the other points separating the sides were aired and narrowed by proposals.

The meetings were recessed on April 14 and scheduled to reconvene on April 25, 1960.

VIII. THE SEVENTH PERIOD APRIL 25, 1960 - AUGUST 22, 1960

Introduction

The seventh period of the negotiations began in Geneva on April 25, 1960, and forty-eight formal meetings were held until the Conference recessed on August 22. The main topics discussed were: the phased treaty and

proposal for the observers on military weapons flights not applicable to the country concerned.[17]

The Soviet Union did not reply to this package proposal during this period, and the issue remained unrisk.

Summary

This period had been marked by relativity labels on the technical problems of the system and appeared to be headed for a definite impasse. Moreover, various statements, the United States Shared agreement, and the Soviet Union's planned agreement and negotiations, appeared to close the way out of the deadlock. With the Western conditional acceptance of the planned agreement and a two-station linked to a research program, remaining the alternative inactive. Further, most of the other points separating the sides were fixed and narrowed by inevitable.

The meetings were resumed on April 19 and extended to December on April 23, 1960.

First: The Geneva session ended: 28, 1960 - January 27, 1960

Negotiation

The seventh period of the negotiations began in Geneva on Jan 11, 1960, and forty-eight formal meetings were held until the conference recessed on August 27. The main topics discussed were: the United treaty and

moratium proposal; staffing and the "deputies" problem; the seismic research program; the Soviet quota inspection proposal; draft Annex I on the detection and identification system; draft Annex II on privileges and immunities; and discussion and adoption of an article for the treaty on definitions of terms and units.

Continued Discussion of the Phased Treaty and Moratorium Proposal

At the 202nd meeting on May 3rd, the Soviet representative introduced the Soviet Union's official reply to the joint declaration of President Eisenhower and Prime Minister Macmillan of March 29, 1960. This declaration proposed a phased treaty with a moratorium below a magnitude of 4.75 for an agreed time in conjunction with a joint seismic research program. The Soviet representative first said that the length of the research program is closely linked to the duration of the moratorium. The Soviet Union, he said, has recommended a joint research program that will last four to five years and feels that the duration of the moratorium should not be less than the period of the joint research program. He continued that the Soviet Union has no objections during the implementation of the program of using a strictly limited number of joint underground nuclear explosions to verify the methods and instrumentation of underground tests below the threshold. Further, he said, the Soviet Union would accept the Western

nuclear cooperation, stability and the "Gaullist" problem, the Atlantic research program, the United Nations peacekeeping operations, Article Three of the Treaty on Outlawing Atomic Arms, and the debacle and disillusionment. Kennedy dealt Adenauer II on politicians and immoralities, and discussion was analyzed of an article for the Treaty on Outlawing of Arms and tests.

Continued Discussion of the Atomic Treaty and Nuclear Research

At the Atlantic meeting on May 4th, the Soviet representatives introduced the Soviet Union's initial reply to the joint declaration of President Eisenhower and prime minister Macmillan of March 26, 1960. This declaration proposed a general treaty with a moratorium below a magnitude of 4.75 for an agreed time in conjunction with a joint seismic research program. The Soviet representatives also put forth the idea of the international program in closely linked to the business of the conference. The Soviet Union, it said, had recommended a joint research program that will lead from to this union and that the detection of the moratorium should not be less than the period of the joint research program. It continued that the Soviet Union has no objections during the implementation of the program of using a strictly limited number of joint underground nuclear explosions to verify the method and instrumentation of underground tests below the threshold. Further, it said, the Soviet Union would accept the Western

proposal that the moratorium not be a part of the treaty but be carried out by unilateral declaration. He concluded by saying,

> the fate of the entire proposal hinged on the duration of the moratorium and that the expiration of the moratorium without agreement would not automatically release the parties of their obligations and the renewal of atomic weapon tests.[124]

The Seismic Research Program

On May 27th at the 206th meeting, the Soviet representative reaffirmed the Soviet Union's convictions in the recommendations and conclusions of the 1958 Conference of Experts. He then stated that the Soviet Union agreed to the Western proposal for a limited number of nuclear explosions as part of the research program because of the Western insistence of their importance. Therefore, he said that since the Soviet Union does believe in the validity of the 1958 Conference of Experts, the research and the experiments of the joint research program should be carried out by the United States on its own territory. However, he added, that because it would be a joint research program, Soviet specialists should be given the opportunity of taking part in the carrying out of nuclear explosions; and, further, the Soviet Union must have guarantees that the nuclear explosions shall not be used for military purposes.[125]

United States submits proposal on safeguards. On June 2nd at the 208th meeting, the United States

representative submitted a proposal on safeguards in connection with peaceful detonations under the research program. He said that the proposal was put forth within the perimeters of certain limiting criteria that the United States must adhere to; namely, the desirability of conducting some nuclear detonations this year to not lose the forward momentum of our seismic research, the need to take account of existing domestic legislation which regulates all considerations involving special nuclear materials, and the desire to prevent the spread of nuclear weapon technology to countries not now possessing it. He then set forth the proposal on safeguards as:

> First, the party shall detonate only nuclear devices of proven design in its experiments.
>
> Second, the devices used in these experiments shall be taken from a special depository of previously deposited devices established by the party within its territory. We consider that such prior deposit should take place within the shortest possible time and thus propose, specifically, 15 August of this year as a time-limit. The devices, suitably packaged, shall be under the constant surveillance of representatives of the other parties or, if preferable, of an international group. The devices may not be altered, and devices, once withdrawn from the depository, may not be redeposited. A device removed from the depository in order to be detonated shall remain under surveillance until detonated.
>
> Third, the representatives of the other parties or of the international group responsible for surveillance shall be permitted to observe all aspects of the detonation and its instrumentation except for the interior of the package.
>
> Fourth, no diagnostic instrumentation will be used in the near vicinity of the device except for specified yield measurements. Such yield measurements as are made under this provision will, of

course, be under the surveillance of the other parties or the international group, as the case may be, and all the information thus obtained will be available to them.[126]

Soviet Reply and counter-proposal. On June 15th at the 214th meeting, the Soviet Union formally replied to the United States proposal on safeguards for research nuclear explosions. The Soviet representative first rejected the United States proposal and then submitted a Soviet proposal on adequate safeguards for research nuclear explosions. The Soviet proposal was:

> 1. A full description and blueprints of the structure of the device to be exploded must be made available beforehand to the other participants in the programme and these must be allowed to inspect the internal and external structure of the device.
> 2. The representatives of all participants in this programme must be present at the place of assembly and explosion of the device.
> 3. The instruments and measurement apparatus shall be installed by all the participants in the programme.
> 4. All data obtained as a result of the explosion shall be made available to all the participants in the programme.[127]

United States introduces new proposal. On July 12th the United States representative introduced a new proposal as a way out of the deadlock over safeguards for experimental nuclear explosions for seismic research. He proposed that:

> Each of the three powers at this table supply in approximately equal quantities a number of nuclear devices of older and militarily out-dated design to be used in the research detonation programme. The devices thus assembled from the three countries would . . . be placed in a pool for use by any of

[illegible] the [illegible] of the [illegible] [illegible] [illegible]

> the three countries in their research programmes. All the devices in the pool could be opened for non-destructive examination of their separate components at the time of their deposit in the pool. This examination would be aimed at allowing all parties to view the internal design of the devices and at ensuring that the devices were safe and suitable for the purposes intended. Following, examination, the devices would be kept under joint technical surveillance until detonated. Observation and inspection of the explosion site and emplacement of the instruments by representatives of the three original parties would be much the same.[128]

Soviet reply to this new proposal. On August 2nd at the 237th meeting, the Soviet Union made its formal reply to this new proposal by the United States. The Soviet representative stated that the Soviet Union had no objection to the establishment by the United States and the United Kingdom of a pool in which these countries desire to deposit nuclear devices for carrying out underground nuclear explosions for purposes of research. However, he continued, the Soviet Government cannot agree that the Soviet Union should be involved as a supplier of nuclear weapons to the United States for research which the Soviet Government believes to be unnecessary. Later in the discussion, the Soviet representative said that the safeguards proposed by the Soviet Union in its proposal would apply to any country that carried on experimental nuclear explosions under any research program. However, he added that the Soviet Union was not planning nor did

the three countries in their research programmes. All the devices in the pool could be opened for non-destructive examination of their separate components at the time of their dismantling in the pool. This examination would be aimed at allowing all parties to view the internal design of the devices and at ensuring that the devices were safe and suitable for the purposes intended. Following examination, the devices would be kept under joint technical surveillance until destroyed. Observation and inspection of the supplied site and equipment of the facilities by representatives of the three nations would be made the same.[179]

Soviet reply to this new proposal. On August 3rd at the 377th meeting, the Soviet Union made its formal reply to this new proposal by the United States. The Soviet representative stated that the Baruch Plan and its application in the establishment by the United States and the United Kingdom of a pool in which these countries desire to deposit nuclear devices for safe-keeping and non-proliferation purposes for purposes of research. However, the Soviet representative said that the Soviet Union should be involved in a supplied nuclear weapons in the United States for research when the Soviet Government believed to be unnecessary. Later in the discussion, the Soviet representative said that the safeguards proposed by the Soviet Union in the proposal would apply to any country that carried on experimental nuclear explosions under any peaceful purpose. However, he added that the Soviet Union was not planning any its

they consider any experimental nuclear explosions as necessary now or in the future.[129]

This period ended without any meeting of the minds on the problem of safeguards for nuclear explosions for research purposes. However, there was a general agreement on the principle that safeguards should be established to ensure that no military advantage is derived from the experimental nuclear explosions for seismic research.

On-Site Inspection and the Quota Proposal

United States introduces draft article titled "On-site Inspection of Seismic Events." On July 13th, the United States representative introduced a draft article on on-site inspection of seismic events. In summarizing the draft article proposal, he said:

> Under paragraph 1 the administrator is to notify all parties to the treaty whenever he determines, in accordance with criteria to be stated in annex I, that a seismic event eligible for on-site inspection has occurred. In this paragraph we make special provision for the possibility that an area eligible for inspection may lie in the territory of more than one party; the effect of our draft would be that events in such cases would be considered to have occurred in the territory of each party concerned so that, if an inspection of the event were to take place, such inspection would be counted separately against the quota number of each party within whose territory the inspection were carried on. This, of course, is regardless of the side of the boundary between the territories of those parties on which any evidence of an incident might be found.
>
> Under paragraph 2 we provide for the immediate despatch of inspection groups by the administrator when events occur in the territory of any of the

they possess any astronomical nuclear explosives in anything one is the future.[139]

This point seems without any meeting at the risks on the problem of safeguards for nuclear explosions for peaceful purposes. However, there was a general agreement on the possibility that safeguards should be maintained in spite that no military advantage is derived from the experimental nuclear explosions for peaceful purposes.

On-site Inspection and the Treaty Proper:

United States Introduces draft article titled "On-site Inspection of Seismic Events." On July 13th, the United States representatives introduced a draft article on on-site inspection of seismic events. In summarizing the draft article proposed, he said:

Under paragraph 1 the consultative is to notify all parties to the treaty whenever an detonation in accordance with criteria to be stated in annex 1, that a seismic event eligible for on-site inspection has occurred. In this paragraph we take special provisions for the possibility that we have eligible for inspection any life in the territory of more than one party. The effect of our draft would be that events in such cases would be considered to have occurred in the territory of each party concerned as that. If an inspection of the first were to take place, such inspection would be conducted separately against the party number of each party which were territory the inspection were carried out. Thus, of course, in recognition of the size of the boundary between the territories of these parties on which any evidence of an incident might be found.

Under paragraph 2 we provide for the immediate dispatch of inspection teams by the administrative when events occur in the territory of any of the

original parties, if a request for an inspection is made within a fifteen-day limit by the original party or parties of the other nuclear side.

Paragraph 3 deals with eligible events occurring in territories of non-original parties. Here we would permit any party to address a request for inspection to the control commission. If the commission should decide that an inspection ought to be carried out and if a quota number were still available for use for an inspection on that territory in that year, then the commission would direct the administrator to instigate such an inspection. We have included a special provision to the effect that in this instance the party liable to inspection should abstain from voting when the decision of the commission was being made.

In Paragraphs 4 and 5 we cover the matter of determining the number of on-site inspections which may be carried out on the territory of each treaty party. As for the three original parties, this number would be stated in the treaty after we had reached agreement. As for other parties, the number would be determined by the commission, after consultation with the party, by a two-thirds vote of the commission. We further provide that, in any case, this number could not be lower than two, and there is also a formula for arriving at a provisional number pending the commissions determination of the party's regular annual number.

In paragraph 6 we made provision for review of all these numbers for all parties, and here we require that this review take full account of the practical experience of the operations of the system and measures taken to maintain or improve its effectiveness. The numbers may be revised by the commission with the proviso that no number shall fall below two or be less than 30 percent of the average number of underground events of seismic magnitude 4.75 or above occurring in a party's territory and remaining unidentified under the criteria which will be agreed and of course stated in annex I.

In paragraph 7 we provide for the commencement date of the annual inspection periods during which the inspection number of each is to be used.

In paragraph 8 special provision is made to cover the possibility that a party may expressly request inspections on its territory, or that with its agreement a number of inspections above its quota may be carried out.

The final paragraph of this article states that

"the administrator shall make available to all Parties to the Treaty within twenty-four hours after receipt all reports submitted to him by on-site inspection groups, together with relevant data and analysis.[130]

The United States representative, in concluding his statement, said that the draft article was submitted by the United States in an attempt to put together in one article the elements that deal with on-site inspections that were included in the previous United States draft articles VI and IX on the functions of the Control Commission and Administrator and his staff previously submitted in a revised form on July 1, 1959.[131]

Soviet critique of United States proposal. On July 26th at the 234th meeting, the Soviet representative gave his formal reply to the United States proposal on on-site inspections. In his initial remarks, he said that the Soviet position in relation to on-site inspection was based on three arguments.

> First, that a demand for an inspection is an official expression of suspicion that the State to which the inspection group is to be sent has carried out a secret underground nuclear explosion and has thus violated the treaty on the cessation of nuclear weapon tests.
>
> Second, that an on-site inspection affects the security interests of the State on whose territory this measure is carried out.
>
> Third, that inspection will be used not in order to apprehend violators, since we believe that there will not be any, but only in order to announce, after carrying out such an inspection, that suspicions that a nuclear explosion had been carried out were completely unfounded and that the treaty was being observed.

Because of these arguments, he said that the number of inspections which the sides should be allowed for the purposes of mutual security should be small. The suggested United States figure of 20 inspections on the soil of the Soviet Union a year, he continued, was "completely unrealistic and unacceptable."[132]

Soviet Union introduces quota number proposal. Following his initial remarks about the Soviet views on inspection and the United States proposal, the Soviet representative introduced a proposal for a specified number of on-site inspections to be included in the treaty. He proposed that the treaty contain a provision to the effect,

> That on the territory of the Soviet Union and likewise on the territories of the United States and the United Kingdom, and on territories under their jurisdiction up to three visits per year may be made by inspection groups to each of the above mentioned countries, to any place where, according to readings of instruments at control posts, unidentified events suspected of being nuclear weapon explosions have been observed. An inspection group within the specified limits shall be dispatched by the control commission for on-site investigation of an event suspected of being a nuclear explosion, at the request of any of the original parties to the treaty . . . and the concurrence therewith of the other parties shall not be required.

He added that the Soviet Union considered it "essential" to use its quota for on-site inspection of any event below or above the 4.75 threshold, and that this quota was subject to review in accordance with the same

provisions adopted for review of the system, two years after adoption of the treaty and annually thereafter.

In reference to the draft articles on on-site inspections submitted by the Soviet Union and the United States, he declared that there was not too much difference; and if the United States approaches the problem realistically, the problem could be settled quickly.[133]

United States comments on the Soviet quota proposal. The initial United States comment was to reaffirm the United States views on on-site inspection as: first, to ascertain if there has been a violation; and second, to deter a potential violator. The United States representative commenting further said that there is very little deterrent factor in the Soviet proposal of only three inspections out of several thousand incidents. The quota number must be based or related, he said, to the number of unidentified events.

At the 236th meeting, the United States representative commented further on the Soviet quota proposal. He said the United States does not want to inspect every unidentified seismic event. It is impracticable and unnecessary. All the United States desires, he continued, is that the number of inspections must be mathematically related to the number of unidentified seismic events. The purpose of having any control system, he added, is to

provisions adopted for review of the system, the years after adoption of the survey and security guarantees.

In reference to the first criterion we realize improvements achieved by the Swiss Union and the Swiss Zurich. We believed that there was not too much difference and if the United States Government the problem possibility, the global would be applied solely.[11]

United States concerns in the Soviet media territory

The United States concept was in practice the United States view on nuclear inspections as first, in accordance if there was such a statistical and second, to defer a practical reality. The United States preservative commanding Russian exit and study is very limits determined whether in the Soviet personal or only known inventions and of novel inventions. The open sources must be which we violent, in mind, by the number of subscriptions owners.

In the 21st century, the Soviet Union centralized communal further on the Soviet space personal. It said the United States does not more to lessons every maintenance seismic event. It is impractical and unnecessary. All the United States desires, be satisfied, is that the number of inspections must be substantially related to the number of intercontinental ballistic missile. The purpose of having any nuclear system, in short, is to

provide for reasonably effective assurance that all parties to the treaty are fulfilling their obligations. He then went on to say that the present state of technology did not allow the identification of all events as either man-made or natural; therefore, on-site inspections are necessary to confirm this fact and are not a suspicion of a State of having violated the treaty.

In relation to the argument of the Soviet Union that the number of inspections must be kept small to protect the security interests of the country being inspected, he stated that this was a familiar argument "but not the least completely convincing." He added that the inspection area would be quite small, 200 to 500 kilometers, and the means to get the team to the area and its equipment to the area would be subject to the control of the host country. Further, he continued, there had never been any objection to the number of observers that the host country could use at the site to protect its own interests.

He then said that he was rejecting the quota proposed on technical grounds; however, "how the final quota is arrived at does not necessarily have to be based on technical grounds." Further, he added, the United States figure of 21 inspections was based on the estimate of 105 unidentified events that their experts estimated for the Soviet Union annually and taking 20 per cent of this total as acceptable.

provide for economically efficient performance thus all powers by the treaty for fulfilling state obligations. We then went on to say that the private state of bondsmanry fit not with the determination of all women to either remade or unknown interfere, so-also impediment are necessary to constrain this fact and are not a question of a state of being violated the treaty.

In relation to the argument of the Indian Union that the treaty at independence was in fact made to protect the minority interests of the remaining state, Lorenzo, he stated that this was a "military argument that may give least compulsorily constraining." In order that the impression was really be quite small, [illegible] the following, and the means to get him back to the area and its neighbours to the area would be subject to the control of the just [illegible]. Nehru, in conclusion, stated that [illegible] objection to the [illegible] it observes that the [illegible] could use as the [illegible] to protect its own interests.

In this case also that in her relinquishing the [illegible] passed on [illegible] argument. "Now the final [illegible] is arrived at [illegible] necessarily have to be [illegible] treatment process." Finally, in model, the Indian [illegible] figure of 71 [illegible] was based on the [illegible] of its [illegible] [illegible] that [illegible] [illegible] the [illegible] [illegible] [illegible]

The Soviet draft article on on-site inspections was also inadequate, he continued, because, first, it fails to state how the parties are to be informed about the occurrence of events eligible for inspection; second, it fails to make any provision at all for on-site inspections on the territories of non-original parties; and third, it does not establish the basis upon which quotas are to be reviewed or revised periodically.[134]

This period ended on August 22 without any further progress on solving this stumbling block.

Inspection Criteria

Another main aspect of the problem of inspection, criteria, was also given wide treatment during this period. The Soviet Union had submitted a proposal for temporary criteria on February 16, 1960, and the United States had submitted amendments to this proposal on March 2, 1960.[135]

United Kingdom proposal. On May 12th at the 205th meeting, the United Kingdom representative submitted a proposed amendment to the temporary criteria in an attempt to break the deadlock. The remaining issue separating the sides from reaching agreement was the size of the inspection area. The Soviet proposal stated 200 square kilometers and the United States amendment 500 square kilometers as the maximum area for inspection. The proposal put forth by the United Kingdom representative proposed

The Divine Grace Article on one-site happenings was also inadequate, he continued, because, first, it fails to state how the parties are to be informed about the occurrence of events eligible for impartiality, second, it fails to make any provision at all for non-site happenings or the territories of non-related parties, and third, it does not establish the basis upon which parties are to be reviewed or related particularly.[34]

This panel added on August 22 without any further proceed on solving this stumbling block.

Impartial Criteria

Another main aspect of the problem of impartiality, either, was also given this thoroughness during this period. The Swiss Union has submitted a proposal for temporary criteria on January 13, 1960, and the United States has submitted memoranda in this proposal on March 2, 1960.[35]

United States Proposal. In May 1959 at the 1959 meeting, the United Kingdom representative submitted a proposed amendment to the temporary criteria in an attempt to break the deadlock. The resulting term expressing the sides from reasonable proximity was the area of the Demilitarized area. The Soviet proposal stated 500 square kilometers and the United States proposed 100 square kilometers as the maximum area for impartiality. The proposal put forth by the United Kingdom representative proposed

that 200 square kilometers be the standard area of inspection in cases where adequate travel-time curves exist and where data from a sufficient number of control posts surrounding the epicenter have been obtained. In cases where one or the other of the two conditions is not fulfilled, then the larger area of 500 square kilometers would be open for inspection.[136]

Soviet comments. The Soviet representative at the 217th meeting on June 22 commented on the United Kingdom amendment proposal said that the conclusions of the Conference of Experts in 1958 had put forth the area of localization of 100-200 kilometers and subsequent technical discussion had not disproved this conclusion. Therefore, he continued, the Soviet Union believes that the conclusion of the experts should be used because the three powers had agreed on the conclusions of that conference. He clarified the Soviet position when he said that

> 200 square kilometres is a localization in those cases where an event takes place in the centre or is surrounded on all sides by control posts. But if the control posts are situated to one side of the event, in such cases we provide for the possibility of a more extended area in which inspection will be carried out.[137]

New United States proposal. On July 13th, the United States representative introduced a proposal on temporary simplified criteria for on-site inspections.

This proposal incorporated the original Soviet proposal, the suggested United States amendments, and the United Kingdom suggested amendment. This article, he said, was to be incorporated into annex I on the detection and identification system. On the issue of localization of events for inspection, the one issue not agreed upon, it stated:

> In cases where adequately precise regional travel time curves are available, and where consistent arrival times are available from control posts surrounding the epicentre, that is, from control posts at least one of which lies in every possible 90 degree sector around the epicentre, the area eligible for inspection will be 200 square kilometres. In cases where adequately precise regional travel time curves are not available, or where data from control posts lying in every possible 90-degree sector around the epicentre are not available, an area of 500 square kilometers shall be eligible for inspection. The area eligible for inspection shall be chosen so as to have the highest likelihood of containing the epicenter.[138]

No further action was taken on this issue during this period.

Draft Annex I - Detection and Identification System

Another important aspect of the treaty that was given extensive discussion during this period was draft annex I on the Detection and Identification System. On July 20th at the 231st meeting, the United States representative introduced a new and revised version of annex I which incorporated all the modifications in the system recommended by the United States since it was originally introduced on December 18, 1958. The draft annex was

divided into five main parts; part I was a general description of the system, part II dealt specifically with the individual components of the system, part III dealt with data reporting and evaluation, part IV concerned itself with support facilities including communication system, and part V dealt with the phasing of headquarters and regional offices. It was in regards to part V that the majority of the discussion was concerned.

Soviet views. On August 11th the Soviet representative put forth the Soviet views in regards to Part V of the annex on the phasing of the installation of the detection and identification system. He first commented that he believed that the proposal was departing from the principle of equality because it only installed control posts in the Southern Hemisphere in the second and third phase. This he felt would be to the advantage of the West because they do most of their testing in the Southern Hemisphere.

The second comment he made was in reference to the number of control posts to be established in the countries of the original parties. The figure for the United States of eleven he felt was too low, and the figure of twenty-one for the Soviet Union was much too high. He then recommended two control posts in European Russia because it is largely an aseismic area. In relation to the Eastern part of Russia, he stated that it was necessary to consider the total number of control posts needed for all Asia,

Having into five main parts: part I was a general description of the system; part II dealt specifically with the individual components of the system; part III dealt with data supporting and evaluation; part IV dealt with support facilities including communications system; and part V dealt with the problem of background and explanatory material. It was in response to part V that the majority of the discussion was concerned.

Social class. In spite of the Soviet requirements that not even the social class of the individual be known to Soviet officials in order to insure the objectivity of the classification and classification system. It was considered that to believed that the practical use departing from the principle of equality because in only isolated central posts in the Southern hemisphere in the remote and bitter climate. This fact would be to the advantage of low-class because they do most of their testing in the Southern hemisphere.

The social element in this was is relevant to the number of central posts to be established in the remoteness of the military units. The figure for the United States of classes in this was low, and the figure of money-one for the Soviet Union was much the high. The two remarked the central posts in European Russia because it is largely an central area. In relation to the United and of Russia, it stated that it was necessary to consider the total number of central posts needed for all area.

thirty-seven. Eastern Russia, he said, contains about 40 per cent of the area of continental Asia, but only a small percentage of the total seismic area is contained in the Soviet Union; whereas, almost the entire rest of Asia is seismic. Therefore, he recommended that no more than thirteen control posts should be installed on the Asian territory of the Soviet Union. This would make the total acceptable control posts in the Soviet Union fifteen.

He then went on to comment on the installation schedule for aircraft sampling flights over international waters and the installation of shipboard stations. The Soviet Union, he said, considered that because they did not present any great difficulty in inaugurating, they should be put into effect during the first phase. He also stated that the formation of inspection teams would be pointless until the control posts have been installed and were operational because inspection can only be justified on technical data from these control posts.

In concluding, he submitted a Soviet draft proposal on the installation schedule of the system incorporating the Soviet views on the weakness of the proposed United States draft.[139]

This is where the discussion stood when this period came to an end.

The Deputies Problem and Staffing

Deputies controversy. The Soviet Union had introduced the problem of the deputies with its proposed amendments to draft articles VI and IX on the functions of the control commission and the administrator and staff. The amendment recommended appointment of two deputies by the control commission, one to represent each side.[140]

New Soviet proposal. On June 21st at the 216th meeting, the Soviet representative submitted a new proposal on "deputies" as a means out of the deadlock on the issue. He first commented that there were two outstanding problems on the question of the administrator and his "deputies." First, "the problem of filling the administrator's post when vacant" and second, "the problem of the administrator's deputies." As to the first problem, he felt that it was not serious because someone could always be found that was acceptable to both sides. For solving the second problem, he introduced a proposal that three deputies be appointed: one from each side, and one upon agreement between the two sides. Further, he continued, this third deputy selected by agreement of both sides would act in the capacity of the administrator when he was unable to fulfill his duties or when the post became vacant but only for the remainder of his predecessor's term.[141]

The Governing Problem and Identity

Security Bureaucracy. The Soviet Union had intensified the problem of the dichotomy with the government agencies to carry analysis (7) and (2) on the functions of the central committee and the administration and staff. The membership recommended appointment of two deputies for the central committee and to establish commission.[140]

The Judge Concept. The Jews lost at the 22nd meeting; the Jewish representatives maintained a new position on the Yugoslavs as a result and of non-Russians on the issues. The first demanded that there were two autonomous problems on the qualities of the administration and its "deputies." First, "the people of [illegible] the nationalities [illegible] when trained" and second, "the problem of the administrative [illegible]." As the first article analyzed, the fact that it was not serious because [illegible] could always be found that was acceptable to [illegible]. For meeting the basic problem, he [illegible] a [illegible] that there [illegible] "[illegible]" and [illegible] and good agreement between the two [illegible]. Further, [illegible] nationality, the [illegible] majority achieved by agreement of [illegible] would act in the [illegible] of the [illegible] administration [illegible] be [illegible] to satisfy the [illegible] to [illegible] the [illegible] [illegible] and only for the [illegible] of the [illegible] [illegible].[141]

United Kingdom introduces new Western proposal. On July 6th, the representative of the United Kingdom introduced a draft amendment to the article on the functions of the administrator and staff. The amendment proposed that:

> The commission shall appoint the Administrator and the First Deputy Administrator; these appointments shall require the concurring votes of the original Parties on the Commission. In addition, the administrator shall appoint four other Deputy Administrators; two of these Deputy Administrators shall be appointed with the approval of the Governments of the USSR, and two shall be appointed with the approval of the Governments of the United Kingdom and the United States of America.
>
> The term of office of the Administrator shall be a period of three years. The initial term of office of the First Deputy Administrator shall be a period of two years; all subsequent terms of office of the First Deputy Administrator shall be a period of three years. The term of office of the other Deputy Administrators shall be a period of three years. Each shall be eligible for reappointment. The First Deputy Administrator shall act in place of the Administrator in case of absence or vacancy. An Administrator appointed to fill a vacancy which has occurred before the expiration of the term provided by this Article shall hold office only for the remainder of his predecessor's term, but shall be eligible for reappointment.[142]

Soviet comments. The Soviet representative gave his official reply to this new Western proposal on "deputies" at the 130th meeting on July 15. He said that they agreed to the amendment in principle, but they could not agree to the system of appointment because it was unsound and unfair. By the Western proposal, he said, "the first deputy would be independent of the administrator as far as procedures of his appointment was concerned, whilst the

other four deputies would be placed in an inferior position." He stated the Soviet position as that all of the deputies should be equal in status. Based on these comments, he recommended that they should all be appointed using the same procedures and that they be recommended or approved by the Governments of the side concerned. He then introduced a draft proposal incorporating the above viewpoints of the Soviet Union.[143]

Western comments on the Soviet counter-proposal. The United States representative commenting on the new Soviet proposal on August 5, stated that the "only outstanding difference between the sides on this question remained the method of appointment of the four functional deputies." He continued that the United States could not accept the Soviet viewpoint on the selection of the deputies by the Control Commission. The arguments he gave were that to do so would be contrary to good administrative practice and it would not take into consideration the interests of the Administrator in selecting his staff functional heads within the guidelines established by the Commission. Further, he stated that it was not too clear what voting procedures the Commission would use on this question and there were doubts that there might arise the possibility of the Commission disapproving the nominations of a government.[144]

This is as far as this problem was solved during this period, but there had been decided progress and the differences appeared to be negotiable.

Staff problems. The other area of disagreement still remaining was the staffing problem. The principle of "thirds" had been generally agreed upon, but it was in the dispensing of the last third that caused the disagreement.

New United States proposal. On May 9th at the 203rd meeting, the United States representative introduced a new staffing proposal that incorporated the provision of the "thirds." The proposal provided that staff appointments be evenly distributed in thirds, one-third for the Soviet Union, one-third for the United States and the United Kingdom, and one-third to nationals of other countries. In regards to the third third the proposal stated that "appointments of scientific and technical staff shall be made in such proportions that the legitimate interests of the Parties to this Treaty, including the original Parties, will not be prejudiced." Further, the proposal stated that the head of the control post shall be a national of a country other than the host country. Also, on-site inspection groups shall be composed of technically qualified personnel who are not nationals of the country being inspected but that country may designate one or more observers to accompany the inspection group.[145]

Soviet reply and counter-proposal. The initial Soviet reaction to this new Western proposal was to repeat past arguments that without specific language on the allocation of the third third it would work to the advantage of the West. Further, the Soviet Union objected to the exclusions of host country personnel on the inspection groups.[146]

On June 20th at the 215th meeting, the Soviet representative introduced its own staffing proposal. It set forth the Soviet views on the allocation of the third third equally among the three elements. It also stated that on-site inspection teams should be organized on the principle of parity. The proposal further stated that the chief or acting chief of each control post or inspection group should be a national of the host country and his assistant should be from the other side of the original parties. Further, it stipulated that appointments of specialists from nationals other than the original parties shall be made in equal proportions from personnel recommended by the original parties.[147]

United States comments on Soviet counter-proposal. At the 217th meeting on June 22, the United States representative commented on the new Soviet staffing proposal. First he objected to the Soviet proposal that appointments be made from lists furnished by governments. Second, he

Social unity and centre-composed. The British Tamils expecting to find an Indian government and to impact part sequences into original semantic imagery on the situation of the third third it would meet on the interchange of the work. Further, the Tamils lines adjusted in the mechanisms of local monetary parameters on the integration process.[1]

In-time age as the site meeting, the Tamil audio-material introduced its own marking processes. In-use Tamil the Jaffna views on the all-written of the third total equally among the three elements. It also showed that non-site integration tools already be initiated on the primacy of parity. The projected function stated that the child on acting state of each common year as Jaffna-Tamil group should be a national of the long country and its negotiation should be from the active side of the original parties. Further, it criticized that equivalents of specialists from Jaffna-Tamil whom than the original parties shall be more in equal processing from independent conditions by the original courses.[2]

United States methods in Jaffna-centre-composed. At the City meeting on June 20, the United States argumentative commented on the new Jaffna statistic frequency. First in objection to the joint-project that agreements be made from state finance functions by government. Second, in

objected to the extension of the thirds principle to the auxiliary personnel of the headquarters. Third, he said, the Soviet provision that no scientific and technical personnel who were nationals of non-original parties could be given positions in the control organization unless they had first been recommended by one or more of the original parties was not acceptable. He concluded by saying that the criticisms put forth were not of principle but of the method involved.[148] Although there was additional discussion on these proposals, no formula could be found to settle the outstanding differences on the problem of staffing.

Adoption of the Definition Article

In order to dispel problems of interpretation of technical criteria, the United States representative proposed on May 11, at the 204th meeting, that an article on definition of units and terms be added to the treaty. At the 235th meeting on July 27, the Conference adopted the draft article on definitions of units and terms which was introduced by the United States with a small Soviet technical amendment.[149]

Summary

This period did not see any concrete results, outside of the draft article on definitions, however, there

was a great deal of discussion on the main issues still separating the two sides. There were many proposals put forth by both sides in an effort to solve some of these differences. However, with the introduction of proposals and counter-proposals the differences were being constantly narrowed down to basic principles on which so far there had not been much give and take.

IX. EIGHTH PERIOD SEPTEMBER 27, 1960 - DECEMBER 5, 1960

Introduction

The eighth period of negotiations began on September 27, 1960. During the period, twenty-seven meetings were held. This period found the representatives discussing the main issues which were keeping the Conference from reaching agreement on a final treaty. These included: the moratorium on the phased treaty; the installation schedule of the detection and identification system; the quota and on-site inspections; and the problem of deputies. Additionally, progress on the final draft treaty was made with the adoption of Annex II on privileges and immunities.

The Moratorium

Although the moratorium was not to be included in the treaty but would be established by unilateral

was a great deal of discussion on the main issues still separating the two sides. There were many proposals put forth by both sides in an effort to solve some of these differences. However, with the introduction of composite and counter-proposals the differences were being constantly narrowed down to basic principles on which no far-reaching but not them each give and take.

Tu. Eighth Voting Sessions 17, 1960 - October 6, 1960

Introduction

The eighth series of negotiations began on September 17, 1960. During the period, twenty-seven meetings were held. This period from the representatives discussing the main issues which were keeping the Conference from reaching agreement on a final treaty. These included: the sovereign on the ground treaty; the jurisdiction schedule of the Antarctica and identification system; the space and no-site inspection; and the problem of security. Additionally, proposals on the final draft treaty were made with the adoption of these it on privileges and immunities.

The Territories

Although the territorial was not to be included in the treaty but would be established by unilateral

declaration by the separate governments, it was a chief obstacle to agreement on the phased treaty.

On September 27th at the 247th meeting, the United States representative presented the United States proposal on the moratorium. He stated that the moratorium should be effective upon signature of the treaty for such period as then still remains of the two-year seismic research program, plus three months to review the results of that program. In support of the proposal, that would end at the same time as the research program, he added,

> this approach is eminently sound because the purpose of the moratorium is to avoid the undesirable aspects of a resumption of nuclear testing below the 4.75 threshold during the very period when research is being carried on, in the hope of making possible an extension of effective controls to seismic events of a magnitude of less than 4.75.

Further, he concluded that the United States is opposed to moratoriums because it runs contrary to the principle that there should be no disarmament obligations without controls. Therefore, he added, the moratorium must be kept short and be consistent with the time needed for the research program.[150]

On October 5, 1960, at the 250th meeting, the Soviet representative formally commented on the suggested United States proposal on the moratorium. He first said that the Soviet Union considered the proposal "ambiguious and vague." This, he said, led the Soviet Union to be puzzled by the proposal. The main preoccupation, he continued,

duplicated by the Japanese government, it was a vital obstacle to agreement on the proposed treaty.

On September 17th at the 12th meeting, the United States representative presented the United States proposal on the restrictions. He stated that the restrictions should be effective upon signature of the treaty for each period in that still remains of the two-year moratorium towards pre-war, plus three months to review the results of that program. In support of the proposal, that would not at the same time be the research program, he added,

> This approach is admittedly based because the purpose of the moratorium is to avoid the unnecessary re-
> petition of a repetition of nuclear testing before the
> 2.17 threshold during the very period when research
> is being carried on, in the face of mounting uncertainty
> an evaluation of effective capacity to reliably monitor
> at a magnitude of less than 4.75.

Further, he concluded that the United States is opposed to restrictions because it runs counter to the principle that there should be no discrimination against nuclear. Therefore, to adopt, the moratorium must be kept short and be consistent with the time needed for the research program.[50]

On October 5, 1960, at the 12th meeting, the Soviet representative formally commented on the suggested United States proposal on the moratorium. He first said that the Soviet Union considered the proposal "unfortunate and vague." This, he said, led the Soviet Union to be cautious by the proposal. The main pronouncements, he reiterated,

appears to be

> not a desire to improve and increase the effectiveness of control over underground low-yield nuclear explosions but a desire to be rid altogether of the moratorium or at least to be freed as quickly as possible from any obligations in connexion with the moratorium.

Further, he said, "we all agree that the period of the moratorium should correspond approximately to the duration of the scientific research program." The Soviet proposal of a moratorium of four to five years, he continued, was based on a United States scientific estimate that the research program would require about three years and that to establish an effective system of detection would require about a few more years.

He concluded by saying that the two-year period put forth by the United States proposal was too rigid a time limit, the Soviet proposal of a four to five year program will provide the possibility of organizing a program that would be possible of achieving progressive improvements in the methods of control over events below the threshold. The duration of the moratorium, he added, cannot be shorter than the time needed for the completion of the joint research program. Another argument he put forward for the Soviet proposal was that a research program must be conducted in the light of the actual experience of an operating system and the control system could take from three to four years to be operational in the first stage.[151]

appears to be:

> man's desire to inquiry and increase the attractiveness of venture over undiscovered low-yield sectors, maintaining that a desire by the stakeholders of the spacecraft or at least to be freed as quickly as possible from any obligations to commercial use the spacecraft.

Further, he said, "we all agree that the period of the spacecraft should correspond approximately to the duration of the scientific research project." The Soviet proposal of a moratorium of four to five years, by comparison, was based on a United States scientist's estimate that the research program would require about three years and then to establish an orbiting system of operation would require about a two more years.

He concluded by saying that the two-year period put forth by the United States proposal was too rigid a time limit, the Soviet proposal of a three to five year program will provide the possibility of organizing a program that would be possible of achieving preparatory improvements in the methods of control over events below the stratosphere. The Congress of the Astronautics, he noted, cannot be counter than the time limit for the negotiations of the joint research program. Neither argument be put forward for the Soviet proposal was that a research program must be combined in the light of the actual experience of an operating system and the control system could take some time to four years to be operational in the first phase.[11]

The United States representative defended the United States proposal at the 260th meeting on October 27. In his initial remarks, he stated that the position of what policy the United States will follow if the seismic research program is not successful at the termination of the research program and moratorium period, "it does not know and that policy must be established only at that time."

In answer to the Soviet statement that the Soviet proposal was based on United States scientific estimates, he declared that this estimate was based on starting a program from scratch including the necessary preparatory time. The current United States proposal is based only on actual experimental time, taking into consideration the actual preparations that have been made and the program can now start from an advanced position.

He further commented that the United States cannot for reasons of principle accept the Soviet proposal that at the end of the two-year research program and the three-month period for consultation, the moratorium should continue automatically.

In regard to the starting time of the research program, he said, the United States position was that the program should start as soon as possible, and before the

The United States representative defended the United States proposal at the 1339th meeting on October 27. In his initial remarks, he stated that the position of what policy the United States will follow if the national research program in not generated at the termination of the research program and construction period, "it does not know and that policy must be established only at that time."

In answer to the Soviet statement that the Soviet proposal was based on United States estimates, he declared that this estimate was based on starting a program from scratch including the necessary preparatory time. The country United States proposal is based only on actual experimental time, taking into consideration the actual preparations that have been made and the program can now start from an advanced position.

He further commented that the United States deemed the problems of priorities except the Soviet proposal that at the end of the ten-year research program and the three-month period for consolidation, the nonproliferation measures automatically.

In regard to the existing plan of the research program, he said, the United States position was that the program should start as soon as possible, and before the

signing of the treaty if agreement could not be immediately reached.

He concluded his remarks by saying that "there is agreement that the moratorium should expire at the same time as the research programme, only disagreement existed on the length of the program."[152]

Installation Schedule of the Detection and Identification System

Another of the major areas of disagreement which was given wide discussion and attempts to settle during this period was the phasing schedule of the detection and identification system. On July 20, 1960, the United States had submitted a revised draft of annex I on the detection and identification system. The Soviet Union objected to portions of this draft annex particularly the number of control posts in the Soviet Union (21) and the exclusion of the establishment of posts in the Southern Hemisphere during the first phase.[153]

United Kingdom Introduces new proposal on phasing. On September 29th at the 248th meeting, the United Kingdom representative introduced a proposal on phasing in an attempt to break the deadlock. He proposed that phase I be completed in four years instead of three as proposed in the United States draft. Further, the proposal stated that control posts on twenty oceanic islands should be

signing of the treaty if agreement could not be immediately reached.

To conclude, his remarks by saying that though it appeared that the Australian delegation agreed in the same time as the remaining participants, only disappointment marked the length of the progress.[illegible]

Interpretation Problems of the Detection and Identification System

Members of the Major Power of disarmament which was given voice discussions and attempts to settle during this period was the pressing requirements of the detection and identification system. On July 20, 1960, the United States then submitted a revised draft of Article I on the detection and identification system. The Soviet Union accepted the provisions of this draft except particularly the number of seismic posts in the quota-quotas (21) and the availability of the establishment of posts in the Soviet Union employing the first phase.[21]

Other eligible Interpretations were concerned in planning the Japanese Ito at the Joint meeting, the United Kingdom representative introduced a proposal on phasing in an attempt to allay the doubtings. He proposed that phase I be completed in four years instead of three as proposed in the United States draft. Further, the proposal stated that non-fixed posts on twenty seismic stations would be

installed in phase I, instead of twelve under the former proposal. Also, he proposed, the installation of the ten control posts on ships should take part in phase I. However, he emphasized two major points: one, that phase I should only cover the territories of the original parties; and two, that inspection should start as soon as possible. He explained that the phasing schedule in phase I would provide a net of control posts in the metropolitan and oceanic territories of all three original parties so that seismic events may be capable of being located in any of these territories. This, he said, would be a net of about 3,400 kilometers spacing, and would enable the simplified criteria to be applied. Further, he added that inspection would begin in these territories as soon as a capability for location exists. Therefore, he concluded, under this proposal, inspections would be capable of being initiated throughout the territories of the original parties at the very latest two years after the treaty went into force.

He then explained how the new proposal would work. The proposal broke phase I into two periods, A and B. Phase I A would be completed within two years and the entire phase in four years. This proposal then put nine control posts in the Soviet Union, six in the United States, one in the United Kingdom, plus the twenty oceanic posts and ten shipboard posts. Phase B would complete the

control posts in the original parties to twenty for the Soviet Union, eleven for the United States, and one for the United Kingdom. He further outlined that the oceanic posts would probably break down to one for the Soviet Union, six for the United States, and thirteen for the United Kingdom. He added that phase I does not contain any control posts in Africa, but the United Kingdom was willing to compromise on this point since she was the only one involved. Phase II and III would complete the network of control posts to 180 in the Northern and Southern Hemisphere, primarily on lands other than the original parties. Phase II would begin within one year and be completed within five after signing of the treaty. Phase III would begin within two years and be completed within six. Thus, the entire control post network would be installed in six years from the time the treaty went into force.[154]

Soviets comments. On October 19th at the 256th meeting, the Soviet representative commented on the United Kingdom phasing proposal. He initially stated that there was apparent agreement on the following questions:

> The length of the three phases of the installation schedule for control posts; the length of each particular phase, as well as the total length of all three phases; the installation schedule for posts on oceanic islands; the schedule for putting ship posts into operation; the installation schedule for posts in South America, Europe and on the metropolitan territory of the United Kingdom.

Where major disagreement remains is the question of the number of control posts to be established on the territory of the Soviet Union. He contended that fifteen control posts for the Soviet Union was sufficient and within the recommendations of the 1958 Conference of Experts. He explained that thirteen posts in Soviet Asia would satisfy the spacing proposed by the experts, 1,000 kilometers in seismic areas and 1,700 kilometers in aseismic areas. To support this view, he pointed out the fact that although Soviet Asia contains 40 per cent of the land mass of Asia, it only contains about 10 per cent of the seismic area and, therefore, the distribution of the posts should be primarily on the basis of an aseismic area.[155]

West disagrees with Soviet analysis. Contrary to the initial remarks of the Soviet representative, the question of the schedule of installation of the detection and identification system remained unsettled because the Western representatives pointed out that their proposal for a four-year first phase was primarily based on the splitting of the phase into two periods to facilitate early inspection.

Soviet reply to the split phasing proposal. On November 21st at the 268th meeting, the Soviet representative replied on the split phasing proposal. He formally rejected the splitting of phase I into two parts, phase A

Among being disappearance results in the operation of the number of control points to be established on the supply of the Jordan lines. The recommend some different control points for the Jordan Tabor was established and within the recommendations of the 1974 Convention of Copenhagen. The applicant have written works in Jordan data which mainly the spacing proposed by the engineers, 1,000 kilometers in mainly area and 1,750 kilometers in mountain areas. In another side view, to prolong our time there been although Jordan data contains 40 per cent of the land area of this, it only covered about 21 per cent of the mission area and therefore, the discussions of the Jordan should be partially on the basis of an assumed area.[33]

Land discovery city border analysis. Certainly in the initial phases of the Jordan experiment, the question of the activity of initiation of the Jordanian and identification system demand practical because the matters experimentation phases are that only provided for a four-year first phase was primarily based on the activities of the phase data now provide to facilitate early implication.

Jordan reply to the city planning problem. In another time as the data meeting, the Jordan representative replied on the city planning problem. He immediately indicated the activity of phase I have two parts, phase I

to be completed in two years and the entire phase in four years. He termed the proposal a move backward instead of forward to meet the Soviet proposal. He continued, a four-year period for the installation of the first phase of control posts "is perfectly reasonable and is based on the shortest period within which this enormous work can be carried out."

In reply to a series of Western questions on his rejection of the proposal, he reaffirmed the Soviet position that inspection would not begin until the end of the first phase when the control system had been fully implemented on the territories of the original parties. He stated further that the simplified criteria that was proposed by the Soviet Union was based on the premise that a control network would be in existence in order to furnish the technical facts to support the criteria for on-site inspections to begin. He repeated the Soviet view that the time when this condition will be met is when phase I of the installation schedule of the control posts has been completed; namely, about four years after the treaty comes into force.[156]

Thus the question of annex I, the Detection and Identification System, was farther from agreement than what appeared to be the case when the period started.

Inspection Quotas

There was a great deal of discussion about the quota system for on-site inspections, but there was no change in positions during this period--the Soviet proposal for three per year and the Western proposal for twenty per year.

The Problem of the Deputies

The problem of the deputies for the administrator was near solution after the Soviet acceptance of the Western proposal of five deputies. However, the Soviet Union wanted all the deputies appointed by the Control Commission after the recommendation or approval of the governments according to their nationality. To this the West objected.[157]

New Western proposal. At the 257th meeting on October 20, the representative from the United Kingdom submitted a new proposal on the appointment of the deputies in an effort to break the deadlock. He proposed that the appointment of all five deputies should be made by the administrator subject to the approval of the Commission. In the case of the first deputy, the Commission's approval would also require the concurring votes of the three original parties on the commission.[158]

Soviet comments. The Soviet representative commenting on the new proposal on the selection of the

Taipeiyiyan Centre

There was a great deal of discussion about the quota system for co-ed independents, but there was no change in procedure during this period—the Student Council drew lots just prior and the Western proposed one hour per year.

The Problem of the Deposits

The problem of the deposits for the administrator was made solution after the joint conference of the Western proposal of five dollars. However, the Aspirin Tales wanted all the deposits decided by the Central Committee after the recommendation or approval of the governments according to their particularity. In this the Tales adjusted.[117]

The Central proposal. On the 27th meeting on October 10, the representatives from the United Kingdom submitted a new proposal on the equitableness of the deposits in an effort to break the deadlock. The proposal that the equitableness of all five deposits should be made by the administrator subject to the approval of the Committee. In the case of the first deposit, the Committee's approval would also involve the determining value of the three medical parties on the consultation.[118]

Tales compromise. The Aspirin representatives concerning on the new proposal on the selection of the

deputies stated that the Soviet Union still preferred to have the five deputies appointed by the commission, but the United Kingdom proposal was a step forward. However, he added, the Soviet Union does not consider that the administrator should have the right to reject personnel recommended by a government nor should the control commission in the case of posts reserved for one of the original parties. He continued that if this was the case, a situation might arise where one party might find itself without representation in the higher administrative echelon.[159]

The problem of the deputies appeared to be headed toward some form of a solution, but this is as far as it went during this period.

Summary

There was very little progress made during this period even though several compromise proposals were put forth by the West. However, the draft annex II on privileges and immunities was adopted on October 17 at the 2554 meeting, but there was very little disagreement over this aspect because the Soviet Union and the West had accepted these terms in conjunction with other international organizations.

Toward the end of this period the majority of the meetings were spent in outlining the areas of separation

Despite stated that the Soviet Union still preferred to have the five Japanese repatriated by the commission, but the United Kingdom proposal was a step forward. However, to added, the Soviet Union then not remember that the administrative change the right to reject questions raised by a government nor should the control commission be the case of parts reserved the use of his original proviso. He continued that if this was the case, a situation might arise where the party might find itself without representation in the signed administrative matters.[11]

The problem of the Japanese expected to be treated toward some form of a solution, was this to be for as it was during this period.

Summary

There was very little progress made during this period even though general conversation proposals were put forth by the Soviet Union. However, the trade issue if no progress and Japanese was expected as usual. If as the time meeting, but there was very little disagreement over this agreed because the Soviet Union and the USA had adopted these being in conformity with other international agreements.

Toward the end of this period the majority of the meetings were spent in resolving the issue of repatriation

between the two sides and in trying to place the blame for non-agreement on the reluctance of the other side to make any move toward the position of the other side.

The Conference recessed on December 5, 1960, and was scheduled to reconvene on February 7, 1961.

X. NINTH PERIOD MARCH 21, 1961 - SEPTEMBER 9, 1961

Introduction

The Conference was originally scheduled to reconvene on February 7, 1961. However, the United States requested a delay until March 21 to enable the new United States administration to make a comprehensive review of the past negotiations and the United States position in relation to the discontinuance of nuclear weapon tests.

This period commenced on March 21 and covered sixty-seven meetings and finally ended in an impasse and was recessed on September 9, 1961, after both sides resumed nuclear testing. The Soviet Union broke the moratorium on August 30th, and the United States resumed testing after a Western proposal to refrain from testing in the atmosphere was refused by the Soviet Union on September 6 by continued testing and was formally rejected on September 9. The negotiations actually regressed due to the introduction of the Soviet "troika" proposal.

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The Conference convened on November 1, 1951, and was scheduled to adjourn on February 7, 1952.

4. NORTH PACIFIC MACHI 21, 1951 - JANUARY 5, 1951

Introduction

The conference was originally scheduled to commence on February 1, 1952. However, the United States requested a delay until March 21 to enable the new United States administration to make a comprehensive review of the part negotiations and the United States position in relation to the disassociation of nuclear weapon tests.

This period commenced on March 21 and lasted eighteen months and finally ended in an impasse and was terminated on September 9, 1953, after both sides resumed nuclear testing. The Soviet Union broke the moratorium on August 29, and the United States resumed testing after a months proposal to initiate talks testing in the atmosphere was released by the Soviet Union on September 3 by announcing testing and was formally suspended on September 9. The negotiations actually resumed due to the introduction of the Soviet "Moscow" proposal.

Discussion revolved around the outstanding issues, the key issues being the "troika," the new Western proposals on the outstanding issues, the inspection problem, the disarmament link, and the resumption of nuclear testing. The United States also introduced a complete draft treaty which incorporated all the proposals and views put forth by the Western delegations up to this time.

The Soviet "Troika" Proposal

The Soviet representative, as Chairman of the 274th meeting on March 21st, took the floor and gave a long opening statement covering all the aspects of the Soviet position and reviewing the reasons for failure of the Conference to achieve an agreement. He then introduced, in his concluding remarks, a new Soviet proposal for

> the replacement of the administrator of the control system by an administrative council consisting of three members, representing respectively (1) USSR and its allies - 1 member; (2) United States, United Kingdom and their allies - the second member; (3) Neutral States - the third member of this administrative council. The three members of the administrative council, who would compose the collective executive organ of the control system, would act as a single whole and would agree amongst themselves on all steps which they would undertake in the execution of their duties.[160]

Western reply to Soviet "troika" proposal. On March 30th, the United States representative replied to the Soviet proposal to replace the administrator with a three member council. In his initial remarks he said that the

Soviet concern about domination of the control system by the West was

> unfounded because the control system we have postulated would operate independently of political considerations. The control system by its very nature should be able to operate independently, and scientifically, and therefore free of political influence. [Further, he added,] if there was any doubt of this the proposal of the Western delegations for parity representation as between the Soviet Union and its allies and the United States and the United Kingdom and their allies should have removed that doubt once and for all.

He commented that the control commission is the chief policy-making organ of the control system and the system would operate under general directives laid down by the commission.

As to the administrator, the United States representative said, he is not a free agent, he is restricted in two ways: "first, he works under policies established by the commission; second, he works under procedures prescribed in the treaty." Additionally, he added, the principle of parity that had been proposed with the appointment of the deputies fully protects the Soviet Union's interests.

In conclusion he said the Soviet proposal of an executive committee "would be unworkable even with the best of good will." He continued,

> Where rapid action is required as it so often will be if the control system is to be effective in investigating unidentified seismic events - which it must do while critical seismological and meterorological evidence is still fresh or available - the administrative council idea would be a

> complete failure even if three men of similar outlook were involved.

Further, he added, this proposal is an addition to the Soviet veto list after they had assured the Western representatives that they would not add any new items. This new proposal for an administrative council by the Soviet Union, he contended, would give its representative a total and absolute veto on every act of the executive head of the control organization.[161]

On April 20th at the 294th meeting, the United States representative continued his discussion of the "troika" issue. The problem of the administrator is so important he said because it is the essence of the executive or administrative function to assure the rapid and efficient operation of the system. He went on to say:

> This is not the policy-making or directing function, which belongs only to the control commission. Rather it is the job of making certain that the precise provisions of the treaty and the orders of the commission are fully implemented. That this will be no small job is evident from the scope and function of the control organization as a whole. There will be thousands of staff members in the 100 control posts, at a large Vienna headquarters, on inspection teams, and at satellite tracking stations. All of those persons will have specified duties, and their activities will have to be properly meshed into a unified whole. It will require great efforts to make sure that this complicated system functions smoothly. It cannot happen automatically. Orders will have to be given to cover hundreds of thousands of problems which will continually arise.

He commented further that it is a recognized fact

complete failure even if there was an adequate non-loop view involved.

Further, he added, this proposal is so ridiculous to the Soviet mind that they would not consider the western negotiators even if they would not say that lightly. This new proposal for an administrative control by the Soviet Union, he continued, really gives the representatives a veto and absolutely vetoes anybody else at the negotiating table of the western negotiations.[15]

In April 1958 at the 12th session, the United States representative continued his elaboration of the "veto" issue. The veto of the administrator is so important he said because it is the weakness of the security or administrative controls to assure the rapid and efficient operation of the system. He went on to say:

> This is not the veto-ridden system of disarmament, which Russia wants only for the control commission, rather it is the job of making sure that the proper provisions of the treaty and the spirit of the convention are fully implemented. That this will be no easy job is evident from the scope and function of the control organization in a vehicle. There will be thousands of Soviet members in the IAC control posts, at a large Vienna headquarters, on inspection teams, and at satellite landing airfields. All of these persons will have specified duties, and their activities will have to be properly ordered into a unified whole. It will take quite great effort to make sure that this complicated system functions smoothly. If chaos is caused happens accidentally, nobody will have to be given to some business or conspiracy or problems which will somehow arise.

The remainder further then is in a mimeographed list

that in large organizations and administrative units, including governments, that a single chief executive officer is the approach used by all. And he added,

> this method of supervising people and getting things done seems to have nothing to do with ideology; the same administrative technique is used in the Soviet Union as in the United States and Great Britain.

He continued that the Soviet proposal for an "administrative council" of three members to represent the three elements in the control organization, these members would be agents of their respective principals and not officials of the control organization and this runs contrary to the concept of international civil servants. Further, he said,

> the unanimity requirements in this council's decisions is the complete antithesis of an arrangement for effective control. The function of an executive organ in an organization such as the one we hope to create is vital if control operations are to have any meaning. Even if one or another individual procedure could be implemented without the administrator's decision, that would be meaningless when the totality of control system operations could be brought to a halt by a three-man council. With one man as the chief executive agent, the control commission can clearly hold him responsible for what is or is not done. With three men having both an equal voice and a right of veto authorized by the treaty itself . . . the possibilities for mischief and confusion would be endless.

He concluded his remarks by saying,

> in all fairness we ask the Soviet Union to face realities. It cannot appear as the champion of strict international armament controls when it insists on subordinating the implementation of all control measures to its own national veto.

> It cannot expect to make progress in the disarmament field without joining with other parties in mutual accommodations necessary to satisfy the objective requirements of adequate controls.[162]

Soviet defense of the "troika." At the 297th meeting on April 25th, the Soviet representative defended the Soviet proposal for a three-man "administrative council" to replace the single administrator. He argued that the Western assertion that this would give the Soviet Union control over the control organization was unfounded and not supported by facts. He pointed out that practically all the operational procedures would be embodied within the treaty and the "administrative council" would not be able to change them. Also, in regards to the criteria, he said, they would not be able to effect this because it would be specifically set forth in the treaty and would not be changeable by the council. He repeated his arguments that the only way that there could be a practical, impartial, and objective implementation of the treaty provisions would be by an "administrative council" as proposed by the Soviet Union. He further commented that the entire organization has been organized along the principle of thirds and thus the principle is recognized and accepted by the West. In conclusion he said that the Western insistence on a single administrator is a disguised attempt to convert the organization to its own advantage. And he added, "it would be impossible to find a single person that would

not fall into the three categories recognized and, therefore, he would be unable to be impartial and objective in carrying out his duties."[163]

"Troika" debate continues. On April 27th at the 299th meeting, the United States representative again took up the issue of the "administrative council" or as it was generally called the "troika." He termed this problem as the issue that was most central and would spell success or failure for the negotiations.

In reply to the previous Soviet arguments that the council could not modify or take action contrary to the treaty, he said,

> Our concern is not that on occasions the administrative council might engage in incorrect actions in running the control system; our concern derives from our certainty that, under the council scheme, there might well be no meaningful action at all, no implemantation of the treaty, and no control. This is the very crux-of the matter-that, after we have sacrificed our unilateral freedom of action to test nuclear weapons for our own defense, we are not to be assured of any effective control over whether other parties which have pledged themselves to do the same are also living up to their obligations. Our ability to check up on them is to be subject to any permission that they themselves may give to allow themselves to be checked up on, even though they may be cheating.

He concluded his remarks on the subject by saying, "the fundamental issue is whether the Soviet Union will accommodate itself to the technical and organizational requirements of meaningful control." He added, "I am waiting patiently and I am prepared to wait patiently, for

[illegible] Thus the three subsystems [illegible], however, [illegible] to [illegible] in [illegible] [illegible] [illegible] [illegible].

Psychic Power Continuum. In years 17- or the 17th century, the Dutch Stoics rejuvenated again from [illegible] the idea of the "[illegible] [illegible]" [illegible] [illegible] [illegible]

a constructive Soviet Union approach to whatever disturbs it. On unrealistic demands, such as that for an administrative council, there can, I submit, be no compromise."[164]

United States General Statement and New Proposals

In the opening statement of the United States representative on March 21, 1961, he outlined the Western position and proposed suggested solutions for the outstanding issues separating the two sides. He said the major issues and the suggested proposal for solving them were:

First, on the length of the research program, the Western powers agree with the Soviet Union that a longer period is needed than the two year proposal put forth by the United States for the initial research program. He proposed a three year period for the initial research program.

Second, on the question of safeguards for research nuclear explosions, the Western governments are prepared to accept the Soviet proposal put forward on June 15, 1960. He added that this acceptance was put forward on the condition that the Western governments receive the same inspection privileges if the Soviet Union detonated any nuclear devices.

Third, on the question of detonation of nuclear

a substantively novel issue appeared to determine liability. In unreliable dogmatic, which we have [illegible] [illegible] [illegible]

devices for peaceful purposes, the Western Powers are prepared to accept the same safeguards.

Fourth, in relation to testing in outer space, he recommended that the conference adopt the recommendations of the Technical Working Group I which was submitted to the conference on July 10, 1959.

Fifth, on the question of control posts, he stated, the Western Powers would approve moving two control posts out of Soviet Asia, thus reducing the total number of control posts on Soviet territory to nineteen. In conjunction with this move, the United States would move one of its control posts either north or south of its borders. He re-emphasized that the Western Powers still hold to the splitting up of the phasing schedule in Phase I of the installation schedule into two periods to be completed within four years.

Sixth, in relation to the question of inspection quota, he reaffirmed the Western position that the number of inspections be linked to the number of unidentified events. Because of this fundamental principle, he reaffirmed the Western proposal for twenty on-site inspections per year in the Soviet Union. He added, that the Western Powers were also willing to accept the concept of equality in assigning inspection quotas, equal for each of the three original parties.

defines the periodical purposes, the Western Lower-Air Tra-
gated to accept the same adjudgments.

Thanks, in relation to testing in outer space, to
recommendations that the conference adopt the recommendations
of the Technical Working Group 2 which was established by
the conference on July 12, 1972.

Fifth, on the question of overall limits, he stated,
the Western Powers would approve moving the control points
out of Lower Air, thus reducing the total number of tra-
ffic points on Pacific territory to eleven. In conjunc-
tion with this move, the United States would move one of
its control points either north or south of its borders,
to re-emphasize that the Western Powers still hold to the
principle of the planning schedule in Annex I of the
installation schedule into two periods to be completed
within four years.

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of inspections is linked to the number of unidentified
events. Because of this fundamental principle, he re-
affirmed the Western proposal for twenty on-site inspec-
tions per year in the Lower Zones. He added, that the
Western Powers were also willing to accept the concept of
equality in erecting inspection posts, equal for each of
the three original parties.

Seventh, he reaffirmed the Western position on the simplified criteria and the size of the area of localization.[165]

Eighth, he reaffirmed the Western position on staffing of inspection teams, special aircraft flights and the nationality of the head of a control post.[166]

Ninth, in regards to the budget, he said, the Western powers accept the Soviet proposal that each original party should have a veto in the commission in approving the total annual budget of the organization but not individual items. In addition, he added, the contributions should be equal for the United States and the Soviet Union with the United Kingdom paying a somewhat smaller share.

Tenth, on the question of the composition of the control commission, he remarked, if a workable agreement on the control organization is found, the Western powers would be prepared to accept East-West parity on the control commission. He then proposed that the control commission should be enlarged to include four Western States, four Soviet bloc States and three neutrals.

In concluding his statement, the United States representative said that "we have now set forth in general terms an overall proposal for a nuclear test ban treaty which ought to be acceptable to the Soviet Union."[167]

On March 22nd at the 275th meeting, the United

Fourth, he reaffirmed the Mandate principle on the acquisition rights and the size of the area of Jerusalem-Tiran.[141]

Fifth, he reaffirmed the Mandate provision on the adoption of legislative issues, special attention and the maintenance of the Bank of a control year.[142]

Sixth, in regards to the Temple, he said, the Mandate power ensure that the Jewish population must maintain property should have a voice in the consultation in appointing the local security bodies of the Supervisoriate and individual items. In addition, in order, the contributions should be equal for the United States and the United Nations with the United Kingdom paying a necessary monthly stipend.

Seventh, on the question of the composition of the central committee, he remarked, if a serious agreement on the central negotiations is found, the Palestine power would be produced to accept land-share parity in the central committee. The Arab provided that the central committee should be enlarged to include Arab workers groups, Jewish Arab Sinn Fein and trade unionists.

In concluding his statement, the United States representative said that the Arab non- was truly in general terms an benefit proposal for a minimum base for Arab-Jewish rights to be incorporated in the Jewish Union.[143]

In their view of the 1936 meeting, the United

States representative continued to outline the Western position. In regards to the seismic research program, he said the United States would welcome Soviet participation in its seismic research program and Soviet scientific criticism, but do not recognize any unilateral Soviet right to insist on altering the contents of our own program. He continued that the Soviet Union should only be concerned about nuclear detonations to be sure that they were not used for the purpose of weapons development. He added that the United States still considered it essential to investigate decoupling techniques in the research program. In relation to the safeguards that the Western Powers would accept for nuclear detonations in the research program, he stated them as: first, British and Soviet representatives would be given blueprints of the nuclear devices to be used, and they would be permitted to examine the device inside and out; second, after inspection, the devices would be reassembled and kept under Anglo-Soviet surveillance until actually exploded; third, instruments and apparatus could be installed at the site of explosion by British and Soviet scientists; four, all the data obtained from the explosion would be made available to the other two countries.

In regards to the moratorium, he proposed that it would last for three years and would have the same limits

as the research program. Further, he continued, "upon termination of the moratorium each of the parties, on the basis of information then available to it, will have to decide what it will do." He added that there should be consultation among the original parties before the moratorium runs out for selecting some alternate rather than just letting the moratorium run out. He concluded by saying that the United States "wants and always wanted a comprehensive test ban treaty as soon as it can be adequately controlled."[168]

At the 278th meeting on March 27th, the United States representative continued his outline of the western position. He proceeded to go into greater detail about the problem of the criteria for inspection; the quota system for on-site inspection; and the Western position in relation to them.

His initial remarks were directed to point out that any inspection quota, no matter how high, would remain entirely hypothetical and illusory if the criteria were so worded that no seismic event were ever certified as eligible for inspection. He added however, that the criteria would only become relevant when the control post system had been installed in proper locations with adequate spacing. Further, he said, the inspection process

would be effective only if the inspection teams were properly organized and equipped.

The United States representative then went on to point out seven ways in which the inspection process could be blocked: first, inadequate or improper spacing or location of control posts; second, the criteria might be so drafted as to make some unidentified events ineligible for inspection or unduly restrict the area of inspection; third, the right of veto by the party to be inspected; fourth, failure to use the best technical methods; fifth, lack of confidence if the inspection teams were wholly or partly composed of nationals of the host country; sixth, if the number of inspections were so small in relation to the number of unidentified events that violators would face little risk of being detected; and seven, unreasonable delay in beginning on-site inspections.

In conclusion, he said that the Western proposals were submitted to prevent the above seven methods of obstructing inspections from happening with its resulting disagreement.[169]

On March 28th, the United States representative went into greater detail on the Western position on staffing. He initially stated that there was agreement on several points: first, that all employees of the control organization should have the status of international civil

servants; second, that nationals of all parties should participate; third, that all employees should be acceptable to their own governments; fourth, that the technical staff should be recruited in equal thirds, one-third from the United States and the United Kingdom, one-third from the Soviet Union, and one-third from other countries.

Disagreement remained with the Soviet Union over their proposal that the administrator should not have the right to refuse personnel recommended by governments. He said the Western position was that "the organization will be obliged to take some qualified national of that party for the job, but he must not have to take the first, or perhaps the second, person so recommended."

There also is disagreement over the distribution of the third third, but he said that there appears to be a means of reaching an agreement. He explained,

> by this I mean that we have in mind that some treaty provision will make it mandatory for the administrator to keep a numerical balance within the third-third between the USSR and its associated powers, on the one hand, and the United States and the United Kingdom and their respective powers, on the other. Apart from this balance the rest of the third third, if any, could be made up of non-associated powers, namely generally, of neutrals.

In regards to staffing of inspection teams and aircraft sampling flights, he reaffirmed the Western view that this cannot be done by nationals of the inspection country because this would introduce an element of

"self-inspection" and undermine confidence in the work of the control organization.

As to the nationality of the chief of the control posts and the head of inspection teams, he stated, he could not be a national of the host country because he would be required to make judgments which might give rise to conflicts of loyalty.[170]

On March 29th, the United States representative reviewed the Western position on high-altitude inspection. He recommended that the satellite system recommended by the Technical Working Group I be installed within six years after the signing of the treaty.[171]

Soviet Reply to the New Western Proposals

On April 4th at the 282nd meeting, the Soviet representative delivered a formal reply on some aspects of the new Western proposals.

First, he remarked that there now appears to be agreement that the recommendations of the Technical Working Group I should be included in the draft treaty for the control of high-altitude explosions.

Second, he commented, that the Western proposal to accept the safeguards on research nuclear explosions was noted with satisfaction. He added,

> the sole reason why the USSR is insisting on its conditions of control is that it is indispensible

"half-hourly" and "intermittent" conditions in the work of the central supervisors.

As on the preliminary or the point of the summary paper and the field of inspection based in circuit, in order not be a contract of the best supply because to work be employed in some instances which might give rise to confusion or injury.[17]

In fact, the Union trades department expressed the further possible on sub-station inspection be recommended that the mobile system recommended by the Electrical Trading Group in the instituted within six years after the signing of the agreement.[17]

Better duty to the New Zealand Community

On April 1st at the 12th meeting, the Joint Industrial Committee carried a formal reply to some aspects of the new Workers proposals.

Firstly, the committee felt there was agreement to be agreement that the recommendations of the Technical Trading Group I should be included in the draft timely for the control or supervisors negotiations.

Second, in commenting, that the workers proposal to change the enforcement on remote control engineers was noted with satisfaction. In addition.

The sole reason for the JIC is consisting on its constitutions of control in that it is instituments

> /sic/ for the other side to have the assurance, by the safeguard, that when research nuclear explosions are being carried out by the United States no loophole will be left, directly or indirectly, for the improvement of existing, or the testing of new types of nuclear weapons.

As to the question put forth by the United States representative that the safeguards proposed by the Soviet proposal would apply to any signatory party which tested nuclear explosions for research purposes the Soviet representative stated that they would, as he had previously stated at the 254th meeting.

Third, as to the United States proposal concerning approval of the budget with the concurring votes of the original parties, he agreed with the Western position on this point but reaffirmed the Soviet position that it should also apply to individual items and parts of the budget. He defended this position by saying,

> it is necessary that the structure and all the parts of the budget should be agreed upon among the original parties to the treaty. Only such an approach will ensure approval of the budget as a whole in the control commission.

Fourth, in regards to the share of contributions, he disagreed with the Western proposal and recommended that the contributions be shared equally among the three original parties.

In concluding his statement, the Soviet representative said that there appears to be agreement among the parties in regards to the following question:

> on control over the discontinuance of nuclear weapon tests at high altitudes and in outer space; on the conditions governing the nuclear explosions to be carried out under an agreed seismic research programme and the conditions of control over nuclear explosions to be carried out for peaceful purposes; and on the question of the approval of the total sum of the budget in the control commision by agreement among the original parties to the treaty.[172]

On April 10th, the Soviet representative commented on other parts of the Western proposals.

First, in regards to the proposals for the safeguards for research nuclear explosions and for peaceful purposes. He interpreted this proposal to mean that after the devices had been inspected internal and external, the device would remain under observation by representatives of the Soviet Union until actually detonated, and this includes the possibility of control over all the processes connected with preparing the device for detonation to ensure that the device being detonated is actually the one that had been previously inspected. As to instrumentation, he said, the Soviet Union interprets this to mean that

> Soviet specialists may set up their instruments both in the immediate neighbourhood of the device which is to be detonated, and in the tunnels leading to the detonation chamber and on the surface of the earth at any distance from the site of the explosion. Further, Soviet experts will have every opportunity of inspecting the system by which the device is detonated, and also of inspecting the environment surrounding the detonation chamber, both before the explosion and after.

Second, in regards to the composition of the control commission he said, the Soviet government accepts the

a control over the discontinuance of medical welfare benefits without cause and in other respects on the condition governing the Minister applicant to be satisfied that a person relinquishing pro-gramme benefits or measures was employing applications to be satisfied out the personal purposes, and on the question of the approval of the total sum of the benefits in the control commission by appro-ment among the original parties to the treaty.[17]

In April 1[illegible], the Javlon representative commented on other parts of the workers proposals.

First, in regards to the requirements for the talk-ranks the measure contains regulations and its penalty purposes. He interpreted this proposal to mean that after the devices had been implemented internal and external, the device would remain under observation by representatives of the Soviet Union until normally dismantled, and this includes the possibility of control over all the premises connected with producing the device for dismantling to ensure that the device being dismantled is actually the one that had been previously installed. In international relations, he said, the Soviet Union interpreted this to mean that

Soviet specialists may not by their instruments help to the possible reinstatement of the device which is to be installed, nor to the Soviets lack-ing to the information crucial and to the activities of the state at any distance from the view of the applicants. Further, Soviet experts will have every opportunity of inspecting the system by which the device is installed, and also of inspecting the environment surrounding the information stations, both before the explosion and after.

Second, in regard to the responsibility of the Soviet Union for said, the Soviet government accepts the

Western proposal that the control commission be composed of four representatives of the Western Powers, four representatives of the socialist countries, and three representatives of neutral States.

Third, in regards to the moratorium he said that the Soviet government cannot accept the Western proposal of a three year moratorium which would just pass away after its expiration.

Fourth, as to the number of control posts on Soviet territory, he rejected the Western recommendation of nineteen control posts. He reaffirmed the Soviet position that fifteen control posts was sufficient in accordance with the conclusions of the 1958 Conference of Experts.

Fifth, he said, the Soviet Union could not accept the phasing schedule proposed for installing posts that would put the Soviet Union under control from the very start of the control organizations operations, while large areas which were being used or might be used by the Western Powers for carrying out tests would remain outside such control.

In conclusion, he said that the Western powers were still retaining their old unacceptable positions on the questions of the inspection quota, criteria, staffing of inspection teams and observers for special aircraft flights.[173]

Western comments on the Soviet critique. On April 11th, the United States representative on commenting on the Soviet critique of the new Western proposals said that the Soviet Union had accepted only those parts of the Western proposals that agreed with Soviet positions.

In regards to financial contributions, he said, the Soviet Union was demanding absolute equality; whereas, it was demanding parity in all other aspects of the treaty.

As to the budget question he remarked that the right to veto the budget should only apply to the whole budget because

> the Western powers want to see the budget gradually put together without any veto and then voted on by the Commission in one final decision. If at that point, one original party fails to concur, and if the control organization is left without operating funds, the problem will then be posed in clear form.[174]

On April 26th at the 298th meeting, the United States representative rebutted the Soviet arguments about the scientific basis for their proposal that fifteen control posts be established on Soviet territory. He said that whether you use seismicity as well as area or take the simple geographical area approach by itself, "it still comes out to more than fifteen control posts that should be located on the territory of the Soviet Union." Also, he continued, it can be scientifically shown that the larger the number of control posts surrounding an event the

Western Democrats on the Taxing Authority. In April 1976, the United States Representative on Commerce on the Border critics of the new western proposals said that the Mexican Delta land actually only three-quarters of the Western proposals also agreed with Texian politicians.

In regards to financial contributions, in early, the Texian claims was demanding complete equality whereas, it was demanding parity in all other aspects of the treaty.

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> The Western powers want to see the budget produced by the Executive citizens are Texi and then voted on by the Commission in one final decision. Or as one put, the original party fails to money, and if the control commission is left without operating funds, the problem will then be posed in clear terms.[1]

In April 18 in the Texian meeting, the United States representative rejected the Texian arguments about the arbitrate basis and then proposed that citizen bodies were be established in Texian territory. He said that whether two are sufficiently as well as area to take the single geographical area applicable to itself. It will never not be more than citizen control units that should be [illegible] based on the territory of the Texian Tribunal. Also, in addition, it can be substantially seen that the [illegible] the number of several years successfully as under the

greater the systems ability to identify seismic events. Therefore, he asked, ". . . what possible difference can four more control posts make to the Soviet Union."[175]

The Western Draft Treaty

On April 18, 1961, at the 292nd meeting, the United States representative introduced a complete draft treaty on the discontinuance of nuclear weapon tests on the behalf of the United States and the United Kingdom. This draft treaty incorporated all the proposals put forward by the Western Powers and was introduced to clarify the final positions of the Western delegations in treaty form.

The United States representative said in introducing the draft treaty:

> The draft treaty which we now table is complete. It covers, we believe, every necessary element of an over-all agreement for the discontinuance of nuclear weapon tests. We strongly believe that its provisions call for an adequate control system and a system which does not impose undue burdens upon any party to the treaty.
>
> The draft treaty which we present today is a treaty which the Governments of the United States and the United Kingdom are prepared to sign immediately to end tests underground above seismic scale of magnitude 4.75, in the sensible atmosphere, in the oceans and in outer space.
>
> Its signature would, of course, be accompanied, as we have previously agreed, by unilateral declarations on the part of the three original parties undertaking a moratorium of an agreed duration on underground tests below the treaty threshold level of 4.75 and by agreement that seismic research programmes undertaken by any of the original parties subsequent to signature of the treaty would involve

greater the system reality by identify seismic events. Therefore, he said, "... more positive differences can lead more constant peace ways to the Soviet Union."[17]

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> The draft treaty which we propose today is a treaty which the Governments of the United States and the United Kingdom are prepared to sign immediately or put into underground above seismic data of magnitude 4.75. In the seismic atmosphere, in the oceans and in outer space.
>
> The atmosphere would, of course, be accomplished, as we have previously agreed, by unilateral declarations to the fact of the three original powers undertaking a moratorium of an agreed duration on underground tests below the treaty threshold level of 4.75 and in agreement that seismic research programs conducted by any of the original parties subsequent to signature of the treaty would involve

application of agreed safeguards to such nuclear explosions as may be included in those research programmes. It is to be hoped that at the end of the seismic research programmes our then knowledge will permit us to lower the treaty threshold.

This draft treaty represents our best and most advanced ideas for an agreement which will achieve discontinuance of nuclear weapon tests under adequate international control.

The delegations of the United Kingdom and the United States will, of course, stand ready to explain their views fully and to give careful consideration to any ideas which the delegation of the USSR may have with respect to achievement of the objective of a sound treaty for the protection of the people of the world.

We are prepared to discuss this draft patiently and in detail. It represents our best thought but we are by no means inflexible about it. We are entirely open to reason. We shall listen carefully.

This draft treaty is presented by the Western delegations in a sincere effort to assist our negotiations to reach a successful conclusion.[176]

The Inspection Problem

On April 19th at the 293rd meeting, the Soviet representative defended the Soviet on-site inspection quota of three per year proposal. He repeated the Soviet argument that the Western quota of twenty per year was unrealistic and unacceptable to the Soviet Union.

He refuted the argument of the United States that the number of inspections must be sufficiently high to be an effective deterrent. To support his argument, he said, the violators of the treaty would be one of the three original members, three great powers, and he did not believe that any of them would risk the danger of exposure

application of square adequately to such matters applicable is not to be included in these remarks pro-gramme. It is to be hoped that at the end of the debate research programmes our team knowledge will remain as be lower the treaty-throughout.

This draft treaty expressed our best and most advanced ideas for an agreement which will achieve disarmament of nuclear weapon tests under effective international control.

The delegations of the United Kingdom and the United States will, of course, stand ready to con-sider their views. This is only essential com-ment I am to say these ideas the negotiation of the STAT may have will contain to achievements of the negotiations of a revised treaty for the protection of the people of the world.

We are prepared to discuss this draft jointly and in detail. In expressing our hope towards for we are by no means intransigent about it. We are entirely open to reason. We shall listen sympathetically to other proposals. This draft treaty is presented to the Conference delegations in a sincere effort to make our nego-tiations to reach a mutually satisfactory.

The Tripartite Group

In April 1962 at the Geneva meeting, the Soviet Gov-ernmentity informed the Soviet co-chair Ingredients Gorin of their pre-inter-governmental. He explained the Soviet Gov-ment that his written demand of Soviet per year was co-vertible and acceptable to the Soviet Union.

In reflect the agreement of the United States that the people of Ingredients must be multilateral ligs to be an effective deterrent. In support this argument, in main, the violations of the Soviet would be one of the terms original meeting, these could remain, and be difficult de-liver that any of some would risk the danger of overcome

and the resulting condemnation by the rest of the world for doubtful advantages.

As to linking the number of inspections to a certain percentage of the unidentified events, he stated, "no percentage or numerical relationship can be scientifically justified in this regard, since any number, any percentage can be insisted on with the same degree of justification or non-justification."

In reference to the composition of inspection teams, he stated, that the Western insistence on staffing these teams with non-nationals proves that the West is trying to gain an advantageous position in the recruitment of staff for these important control units. He put forth the Soviet position on this particular issue as:

> the Soviet Union merely proposes that specialists from the Soviet Union and specialists from the United States and the United Kingdom should take part in inspections on an equal basis. We want equal participation of both sides in control operations in all the components at all stages, in all countries. Only such an approach will ensure genuine objectivity and impartiality in control operations.

On the problem of the dispatching of inspection groups, he stated that the previous Soviet proposal prevents the vetoing or interference of the proposed administrative council. By this proposal, he said, inspections may be made at any place where, according to readings of instruments at control posts, a suspected event has

and the resulting unemployment by the bulk of the people the certain advantages.

As to limiting the number of immigrants to a certain percentage of the nationalities among us, we argued, the permanently or temporarily visitations can be scientifically justified in this region, since our economy may prohibitions can be brought to bear the some degree of industrialization and urbanization.

In reference to the composition of immigration teams, he added, that the Mexican laborers to traditional teams teams with non-nationals proves that the week is trying to gain an advantageous position in the recruitment of staff the these industrial central units. He put forth the latest position on this particular issue as:

> The Irvin Union merely proposes that employers from the United States who are quantities from the United States and the United Kingdom should take part in implications on a-equal-basis. We want equal participation of both sides in control operations in all the countries of all-sides, in all monitors. Only such an opinion will make mutual reciprocity and dependability in control operations.

In the period of the mingling of immigrants groups, he added that the Jamaica dealer proposal permeate the values of leadership of the proposed administrative council. By this proposal, we said, immigrations may be made at our union shops, according to quantity of laborers or cents - pers, a supposed money-tax

occurred, at the request of the sides within the limits of the annual quota, and that inspection groups within the specified quota shall be dispatched by the commission without delay, and shall not require agreement between the parties of the treaty. Further, he added, the Soviet Union had previously agreed that inspection groups could be chosen from inspectors maintained at headquarters on a permanent basis.[177]

Western comments. On April 24th at the 19th meeting, the United States representative commented on the Soviet position put forth on the problem of inspections. He first commented, "there have been at least as far as the world at large knows, no breaches of the voluntary moratorium on testing since late 1958." He added, that rather than proving that no signatory would violate its solemn pledge under the treaty, it demonstrates that without controls no one can know the true situation about violations. He continued, that the number of on-site inspections that the Soviet Union is proposing has nothing to do with deterring potential violators, "it is a sort of token or good-humor gesture that has nothing to do with the objective requirements of strict scientific international control."

On the question of the Soviet fear of espionage, he commented, "the United States is just as opposed to having

espionage conducted on its territories as is the USSR. Therefore, the scientific measures the United States proposes must have no significance from an espionage point of view." The twenty inspections that the West proposes, he continued, is based strictly on an interest in effective control, as is the Western proposal that nationals be excluded from inspection teams. He added, "he did not conceive how intelligence could be gathered when the host country could have an unlimited number of observers along with the inspection group."

He further remarked that he was still confused about the procedures for launching an on-site inspection under the Soviet proposal. He declared that

> what is unclear is, first, whether the commission could overrule the party and decide that the seismic criteria had not, in fact, been met in the given case and that therefore there would be no right of inspection; and second, whether a majority on the commission would, by a veto-free vote have to approve the request for an inspection before it could begin.

The United States position on this issue, he said, is that it would be opposed to any intervention by the commission on whether one original party might exercise its right, within the annual quota, to have an on-site inspection conducted on the territory of another original party. He continued, this would be an automatic affair once it had been determined that the seismic criteria had been met. As to the subject of criteria, he said, the purpose of

criteria is to codify scientific standards agreed to by all three original parties so that whenever seismic data recorded by the control system show that these standards have been met, a seismic event automatically becomes eligible for inspection.[178]

United States introduces new proposal on inspections. At the 310th meeting on May 26th, the United States representative proposed in an effort to reach an acceptable figure on the number of on-site inspections that an alternate method which the United States previously proposed could be used to solve the Soviet argument that the Western figures were inflated and not based on scientific fact. This proposal, he said, was made at the 276th meeting that there would be an unlimited number of inspections up to 30 per cent of the unidentified events, or 20 per cent of the located seismic events. This proposal, he said, still stands and is an acceptable alternate to the current Western proposal of twenty inspections per year.[179]

On May 29th at the 311th meeting, the United States representative continued the discussion about the on-site inspection quota. He submitted another United States proposal in an effort to work out some solution to the problem. He proposed that the ". . . quota be worked out on the basis of actual seismic developments, namely, of recorded seismic events on the territory of each original

party." With this as a basis he proposed a sliding scale of inspections with a maximum of twenty per year regardless of the number of unidentified events and a base of twelve inspections per year. The number of inspections between these two figures, he said, would be determined by the actual number of unidentified events between sixty and one hundred, for each five above sixty another inspection could be held up to a maximum of twenty if one hundred were reached.

In concluding his remarks about this new proposal, he said,

> there is a great advantage to the Soviet Union in this proposal because if their scientists are right about the number of unidentified events occurring in the Soviet Union then the quota of inspections for the Soviet Union would be lower. Further, if the Soviet estimate of the number of events is lower in the Soviet Union and higher in the United States then she would have more inspections in the United States than she would receive in the Soviet Union.[180]

Soviet comments. On May 31st at the 113W meeting, the Soviet representative rejected this new alternate proposal of the "sliding scale" of the West. He said it was "unrealistic and unpractical for both political and technical reasons." He repeated the former Soviet argument that the solution of the number of on-site inspections must be solved strictly on the basis of a political compromise.[181]

Disarmament Link

On June 12, 1961, at the 317th meeting, the Soviet representative introduced into the conference records a memorandum from the Soviet Government to President Kennedy of the United States which was handed to him by Premier Khrushchev in Vienna at their Summit Conference.

The memorandum outlined a change in Soviet position in relation to the Conference on Discontinuance of Nuclear Weapon Tests. It supported their proposal for an "administrative council" and reaffirmed their reasons for this proposal. Additionally, it discussed the outstanding issues that were keeping the conference from reaching agreement, the quota, staffing, on-site inspections. It then suggested that it might not be better to ". . . start with the main, the cardinal question, that is to say, the question of general and complete disarmament?" This the note continued would solve all the problems that are plaguing the conference at Geneva, because the Soviet Union had pledged that it would accept unconditionally any proposal by the Western Powers on control, once the Western Powers accept the proposal of general and complete disarmament.

It went on to say that

> . . . at present, when the armaments race is going on in the world and when opposing military blocs exist, we are compelled to maintain our armed forces

> in the interests of the security of our country and that of our allies. So long as States maintain armed forces, no form of control can be disassociated from intelligence work.

The statement concluded by saying,

> the discontinuance of nuclear weapon tests does not mean that the manufacture and stockpiling of such weapons will cease; and the danger of war is not diminished. In these circumstances every State is entitled to suspect that the intention is to use control as a screen for setting up intelligence agencies.[182]

New Western Proposals

Even with the seemingly insurmountable obstacles which the Soviet Union had placed in the way of reaching agreement, the Western Powers introduced further proposals in an attempt to get the Conference back on the right path.

On August 28th at the 337th meeting, the United States representative introduced two new proposals.

The first in reference to procedures to be followed at the expiration of the moratorium proposed that

> about six months before the expiration of the three year moratorium, with respect to tests below the treaty threshold of 4.75, a panel of eminent scientists representing each of the eleven nations which will then be members of the control commission of the treaty organization should be convened.
>
> This scientific panel would be charged with the task of preparing a report to the eleven-nation control commission, by at least a majority vote of the scientists unit, on the following matters:
>
> (1) recommended improvements in the treaty control system in the light of the findings of the

proposed research programme in which we have asked the Soviet Union to participate;

(2) scientific estimate of the capabilities of the control system in the light of such improvements; and

(3) recommendations as to whether or not the treaty threshold of seismic scale of magnitude 4.75 should be lowered, and if so, to what point, and indeed whether the threshold can be eliminated entirely by scientific improvements in the treaty control system.

When that has been done, the control commission itself, composed of four Western Powers, four Soviet Powers, and three neutral or uncommitted Powers, will consider the report and agree, by majority vote, on such draft amendments to the treaty to eliminate or to reduce the threshold as may be required by such of the recommendations of the scientists as the commission may approve. All such treaty amendments would be submitted to the next annual conference of the parties or to a special conference if the annual conference were not scheduled until after the expiration of the moratorium.

In concluding his statement on this proposal, the United States representative remarked, that the Soviet objection to the Western proposals on the moratorium was that it would be "automatically" left to expire. Therefore, he contended, the above proposal would ensure that the moratorium would not be allowed to expire automatically and guarantees the most "careful deliberation and review." This proposal, he concluded, "is a means to make sure that when the treaty obligation is extended to cover underground tests of lower yields adequate control measures shall not be left to chance."

The second proposal that the United States representative introduced was put forth in answer to a Soviet

statement calling for a complete comprehensive treaty over all nuclear tests. He declared that if that was the present position of the Soviet Union, then the United States was ready to meet that position. The United States, he continued, was willing to contemplate an initial treaty threshold that would be lower than the proposed one of the seismic magnitude of 4.75; and further, "we are even willing to consider arrangements, if this, with your cooperation, should prove scientifically possible, which would amount to virtually no treaty threshold at all." He explained this as the United States willingness

> to negotiate here and now for the immediate lowering or even removing of the treaty threshold of 4.75, provided that the Soviet Union is ready to explore with us, and open-mindedly consider those improvements or adjustments in the control system which could so increase its scientific capabilities from the outset as to warrant the lowering or removing of the threshold.

He then outlined what some of these improvements and/or adjustments might be.

> The relocation of some of the control posts in both of our countries and other countries from relatively aseismic to highly seismic areas, if that can be done without injury to the whole control system; the introduction into United States, United Kingdom and USSR territories of a number of unmanned seismic recording stations, perhaps in conjunction with some of the foregoing changes regarding the relocation or regrouping of control posts; modification of the total number of control posts in the United States, the Soviet Union and, possibly, elsewhere; an adjustment of the fixed annual number of inspections in the quota; and the immediate adoption from the outset of certain scientific improvements in the treaty control system.

statement calling for a complete nonproliferation treaty over all nuclear tests. He declared that it could see the present position of the Soviet Union, then the United States was ready to seek that position. The United States, he asserted, was willing to consequently an initial treaty through this would be based upon the proposed case of the nuclear moratorium of 1.71; and further, "we are even willing to consider arrangements, if this, with your concurrence, should prove acceptable, which would amount to virtually no treaty therefore at all." He explained this as the United States's willingness:

> to negotiate here and now for the nuclear limitation as soon after signing of the treaty proposal of 1.71, provided that the Soviet Union is ready to negotiate with us, and meanwhile consider those initiatives or adjustments in the control system which would be increase its authority (specifically from the author) to restrict the launching or running of the missiles.

He then outlined what some of these improvements would activeness might be.

> The relaxations of some of the control posts in both of our countries and other countries from relatively remote to highly sensitive areas, it then can be done without injury to the whole control system. The introduction into United States United States, United Kingdom and other countries of a number of manned atomic exploring stations, perhaps in conjunction with some of the foreign stations, regarding the relocation or lengthening of control posts, modification of the total number of control posts in the United States, the Soviet Union and, possibly, elsewhere, in addition of the final moral number of inspections in the Soviet and the Americans adoption from the basis of reciprocal activities conferences in the treaty control system.

In reference to the two proposals, he concluded

> on the one hand we have the Western proposal for reducing or eliminating the threshold in the treaty at the end of the three year moratorium and on the other hand, we have put forward an alternative proposal for reducing or eliminating the threshold in the treaty immediately. /Further he added,/ we shall continue to work for sound arrangements which will not give the illusion of control without any substance. Aside from that, however, there are no limits to our willingness to negotiate on the scientific control system.[183]

Soviet Comments. The initial Soviet reaction to the proposals was to ignore them and to repeat the argument that all the Western proposals were designed to set up a system of control without disarmament, which in effect would be nothing more than an intelligence network. In conclusion he said,

> the Soviet Union will be prepared, and we have already told you so repeatedly, to sign a treaty on general and complete disarmanent and to agree to any control over disarmament and consequently, over the discontinuance of nuclear weapon tests, but not to any control while the arms race and intensified military preparations continue; that is, the Soviet Union will not agree to control separated from disarmament.[184]

Additional Western proposals. On August 30th at the 338th meeting, the United States representative continued his discussion of the issues separating the two sides in an attempt to find some path to renew true negotiations; he said the main issue separating the two sides continued to be the Soviet stand on the "troika" and he reaffirmed that the West could never accept that proposal. However,

he continued, in order to settle the fears of the Soviet Union that a single administrator might prove partial to one side, the Western Powers were ready to introduce a draft amendment to the article on the functions of the control commission which would authorize the Control Commission to remove an Administrator or Deputy Administrator for failure to comply with provisions of the treaty or for any other reason the Commission decides that it no longer has confidence in him. Such a decision will require the concurring votes of seven of the members of the Commission.

Also in an attempt to settle another outstanding issue, he proposed that on-site inspection teams be composed on one half of either side of the original parties to the treaty, depending on the country inspected, and the other half of nationals of countries not associated with any of the original parties.[185]

Soviet comments. The only Soviet comment that the Soviet representative made on these new proposals was to refer to the same argument that these discussions would not be necessary if the West would accept the Soviet proposals on general and complete disarmament.[186]

Soviet Resumption of Nuclear Weapon Testing

The 339th meeting on September 4, 1961, opened following the announcement on August 30th that the Soviet Union had resumed nuclear weapons tests thus breaking the

moratorium which had existed since 1958. The announcement on August 30th and the subsequent confirmation by the Western Powers that the Soviet Union had exploded a nuclear device in the atmosphere did not create the proper atmosphere for worthwhile negotiations.

The United States representative introduced two Western documents. One a White House statement made on August 30, deploring the decision of the Soviet Union to resume testing. The other document was a joint proposal by President Kennedy and Prime Minister Macmillan to Premier Khrushchev dated September 3, requesting that the three Governments agree, effective immediately, not to conduct tests which take place in the atmosphere and produce radioactive fall-out.[187]

The Soviet representative read into the record the statement of the Soviet Union on its decision to resume nuclear weapon testing. This statement put forth the Soviet view that it had to renew testing for military security reasons due to the current international situation. Further, they contended that France--one of the United States and the United Kingdom NATO allies--had been conducting nuclear tests during the moratorium and hinted that the Western Powers were using this means to test their new weapons while the Soviet Union was refraining from nuclear testing, thus putting the Soviet Union in an

unequal position. The statement continued that plans have been completed for conducting a series of nuclear bomb tests of increased power, of twenty, thirty, fifty, and a hundred megatons of TNT and the powerful missiles to deliver these nuclear bombs to any point in the world where an attack on the Soviet Union could be launched from. The statement concluded by reaffirming the Soviet Union's desire and readiness to sign an agreement on general and complete disarmament which would also put an end to thermonuclear tests.[188]

Recess of the Conference

The final meeting of this conference during this period was held on September 9, 1961.

The Soviet representative read into the record the statement of Premier Khrushchev rejecting the joint proposal of the United States and the United Kingdom made on September 3. He rejected their appeal, the statement said, because of several reasons. First, it did not take into account the current state of international affairs. Second, their statement separates the question of suspension of nuclear tests from the general question of disarmament. Third, the proposal would authorize underground tests for which the United States is prepared to increase its military knowledge plus it does not mention what their ally France will do. The statement repeated Soviet

arguments that the only way to solve the current problems would be to sign a treaty on general and complete disarmament as proposed by the Soviet Union.[189]

The United States representative in commenting on the Soviet statement said that it was nothing more than a crude attempt at "atomic blackmail" in total disregard of the needs and welfare of mankind. In regards to the reason that the Soviet Union has consistently been trying to scuttle the nuclear weapon test ban talks, he said

> that unanswered question of why the Soviet Union became more and more unyielding in its refusal to discuss the Western proposals, to submit proposals of its own, or even to negotiate at all, was finally answered last week.[190]

Summary

When the Conference reconvened on March 21, 1961, there was high hopes that an agreement might be quickly reached. The initial Soviet proposal of an "administrative council" quickly ended this high optimism. The Western compromise proposals, also submitted at the March 21st meeting, were indeed an attempt to solve some of the outstanding issues. However, as the meetings progressed it became apparent that an impasse was imminent and the conference settled down into a series of arguments and counter-arguments to positions of principle from which neither would move. The Western Powers had made their move on March 21st, but the Soviet Union failed to move

any toward the Western position and a deadlock ensued. Although, there was little hope for a breakthrough in the deadlock as some of the statements of both sides indicated, the West continued to try to find acceptable positions on some of the issues. For example, the Western proposal for the "sliding-scale" of inspections was one. The primary stumbling block remained the "troika" issue about which neither side would change their position. An additional roadblock to agreement was introduced with the Soviet statement that it could not agree to control without disarmament and because the conclusion of a test ban treaty would not be a reduction in armaments it recommended that the talks be merged into general and complete disarmament discussions which could settle many of the outstanding issues before the conference in Geneva. This proposal was rejected by the Western powers, and they reminded the Soviet Union that it was they who early in the negotiations kept insisting that the nuclear weapons test ban talks be kept separate from general disarmament agreements and to which the Western Powers made a concession in January 1959.

The <u>coupe de grace</u> for this period was given when the Soviet Union resumed nuclear testing and refused to accept a Western proposal for an immediate ban on atmospheric testing.

Thus, when this period ended, to carry the question

my honor; the western politics was a leading issue. Although, there was little love for a Democrat in my district in view of the statements of John Adams Lathrop, who was instrumental in my nomination, I felt absolutely pledged to some of the issues. For example, the Dawes amendment, the "sliding-scale" of expenditures was one. The library amendment which remedied the situation there about which neither also would change their position. In anything anybody in agriculture was interested with the Dawes statement that it could not agree to another different arrangement and because the consideration of a tari bill already well was in a condition to assure it recommended that the table be merged into general and complete disagreement discussions which would utilize many of the controverting issues before the conferees in Congress. This proposal was adopted by the Senate yesterday, and then included the Dawes Union that is was they who early in the deliberations made indicating that the Senate amendments that has table in fact agree. The general disagreement agreement was to which the Senate Tariff made a recommendation in January 1911.

The Report on Grain for this period was given when the Dawes Union received another letting and returned in amongst a Senate Committee to be immediate and in short-notice testing.

Then, when this Senate amendment, to carry the provision

to the General Assembly of the United Nations, the prospects for reaching agreement appeared to be very dim indeed.

XI. THE TENTH PERIOD NOVEMBER 28, 1961 - JANUARY 29, 1962

Introduction

The tenth and final period of the Conference began on November 28, 1961, following an exchange of notes between the three nuclear powers. Thirteen meetings were held until the Conference ended in another deadlock when agreement could not even be reached on the communique to be issued at the close of the 353rd meeting on January 29, 1962.

The main topic discussed was the new Soviet draft treaty and the Western rejection of it.

New Soviet Proposal

At the 341st meeting on November 28, 1961, which marked the beginning of this period, the Soviet representative introduced a new Soviet proposal. In introducing this new proposal, he argued that a new approach was needed to the question of the discontinuance of nuclear weapon tests, "one which would eliminate the difficulties and obstacles which have hindered agreement in the past." He then proposed that the Conference

> conclude immediately an appropriate agreement on the discontinuance of nuclear tests in the atmosphere, under water and in outer space, that is, in these environments where the implementation of control is not fraught with any serious technical difficulties."

To verify these obligations, he declared, existing national technical system were sufficiently reliable. As to underground nuclear tests, he contended that

> the Soviet Government is of the opinion that States should undertake not to conduct such tests until agreement is reached on a system of control over underground explosions as a constituent part of an international system of control over the implementation of a programme of general and complete disarmament.

He also went on to say that the time had arrived to include France in the negotiations.

The Soviet representative then introduced a draft agreement which incorporated the Soviet position. This draft agreement read:

> The Governments of the Union of Soviet Socialist Republic, the United States of America, the United Kingdom of Great Britain and Northern Ireland and the French Republic,
>
> Proclaiming as their principal aim the speediest possible achievement of an agreement on general and complete disarmament which would abolish for all time the threat of an outbreak of war, put an end to the armaments race and eliminate the incentive to the production and testing of all kinds of weapons, including nuclear and thermonuclear weapons,
>
> Believing that the renunciation by States of the testing of nuclear and thermonuclear weapons would facilitate the achievement of agreement on general and complete disarmament,
>
> Have for these purposes agreed as follows:
>
> Article 1
>
> The States Parties to this Agreement solemnly

undertake not to conduct tests of any kind of nuclear or thermonuclear weapons in the atmosphere, in outer space or under water.

Article 2

For the purpose of exercising mutual supervision of compliance with the undertaking contained in Article 1 of this Agreement, the States Parties to this Agreement shall use their national systems of detecting nuclear and thermonuclear explosions.

Article 3

The States Parties to this Agreement undertake not to conduct any underground tests of nuclear weapons until they have agreed together on a system of control over such tests as a constituent part of an international system of control over compliance with an agreement on general and complete disarmament.

Article 4

This Agreement shall enter into force immediately upon its signature by the Governments of the Union of Soviet Socialist Republics, the United States of America, the United Kingdom of Great Britain and Northern Ireland and the French Republic, and shall be open for adherence to it by all States.[191]

Western Reply to the New Soviet Proposal

The United States representative initial comments on the new Soviet agreement and position were that it was a propaganda proposal and appears to be merely a proposal for a completely uncontrolled ban on nuclear tests. In essence, he said, it calls upon

> the United States, the United Kingdom, France and the Soviet Union to obligate themselves to conduct no nuclear tests in the atmosphere, in outer space, underwater or underground, but there is to be no international control machinery whatsoever to monitor this prohibition in the first three mentioned environments, where total reliance will be placed upon national control capabilities, with apparently no international supervision and without even the means of finding out about what the national stations discover or disseminating the findings of the national system.

As to underground tests, he continued,

> verification of the ban on underground tests, even the Soviet Union still appears to acknowledge that international controls are essential here, but . . . the Soviet proposal declares that no such control machinery can be set up except in the context of machinery established to monitor a treaty on general and complete disarmament.

He declared that

> . . . the United States will undertake no paper commitments or meaningless gestures which can reward only the one Power, the Soviet Union, which has done its cynical utmost heretofore to thwart a sound internationally controlled nuclear test ban treaty.

In regards to the inclusion of France in the negotiations, he declared that even though France became a nuclear power on its own since the negotiations began and was not a party to the original conference, the United States was prepared to accept any nuclear power to join in the deliberations, although the United States feels that additional powers would prolong the discussions.

He stated in conclusion,

> it seems to us that such an approach as is outlined in the Soviet proposals which we have heard here today can only result in much delay in signing a sound and effective internationally controlled treaty, and in consequent failure to end nuclear talks.[192]

Soviet Comments on the Western Comments on their New Proposal

The Soviet representative stated in reply to the Western comments on the new proposal that

> we cannot but express regret that the United Kingdom

> and the United States delegations have been in such a hurry to utterance already to negative comments, I would even say attacks, without having familiarized themselves with the Soviet Government's statement or with the draft agreement, without having studied both these documents carefully and without having examined attentively the argumentation which we have expounded, and that they have declared offhand that this new proposal by the Soviet Union, this new initiative of ours, is virtually unacceptable.[193]

At the 344th meeting on December 5th, the Soviet representative introduced into the records of the Conference a Soviet Government statement which had been released on December 4th. It repeated the argument that the Soviet proposal was put forth as the only solution to the deadlock over the suspension of nuclear weapons tests. Further, it expressed regret that the Western Powers have not taken up this proposal but, instead, statements have been put forth that the Western Powers intend to continue testing in the future. The statement concluded by saying,

> The Soviet Government declares with all firmness that if the Western Powers continue nuclear weapon tests, including tests under ground, the Soviet Union will be compelled, in order to safeguard its security, to conduct such nuclear weapon tests as it deems necessary for the strengthening of its defensive capacity.[194]

Western Formal Rejection of the New Soviet Agreement

On January 16, 1962, at the 350th meeting when the Conference reconvened after a holiday recess from December 21, 1961, the United States and the United Kingdom delivered statements from their governments rejecting the

new Soviet proposal on a nuclear weapons test ban. In his remarks, the United States representative stated that the new Soviet proposal rejects the principle of international controls.

> It asks each participating State to monitor its own performance in fulfilling the treaty, even though this would be both technically and politically inadequate. It seeks to annul and liquidate all the progress achieved in several years of negotiations to work out mutually acceptable treaty provisions for a control system. It requires the Western Powers to rely solely on a Soviet pledge not to test again at the very moment when a grievous Soviet violation of its last pledge to adhere to a moratorium on nuclear weapon tests is still fresh in our memories . . . . it is quite apparent why the United States Government must refuse to have anything at all to do with this retrogressive Soviet plan.

He concluded his statement by saying,

> if the Soviet representative still refuses to negotiate on any basis other than the Soviet proposals and principles which the Government of the United States, after thorough and deliberate consideration, has found to be unacceptable, . . . then we see no alternative to proceed along the lines of a second course of action."

The second course of action he proposed was that the Conference adjourn while the question of an appropriately controlled test ban is considered, in relation to general disarmament and the corresponding international controls, by the Eighteen-Nation Disarmament Committee.[195]

The United Kingdom representative associated himself with the remarks made by the United States representative. He added further that the United Kingdom cannot agree that the Soviet proposals, which were submitted at the November

28th meeting,

> provide a satisfactory basis for negotiation of a treaty providing for the end of all nuclear testing in all environments with effective international control, because the Soviet proposal does not make any provision for an international supervision whatsoever of the observance of such a treaty.

He ended his statement by saying that if the Soviet Government maintains the same rigid position since they offered their proposal on November 28th on a "take it or leave it" basis then the United Kingdom would support the second proposal put forth by the United States, that the Conference adjourn while the question is discussed at the forthcoming Eighteen-Nation Disarmament Committee discussions.[196]

Soviet Reply to Western Rejection of the New Proposal

The Soviet representative attacked the Western rejection of the Soviet proposal of November 28th and repeated his former arguments in support of the Soviet position.

At the 352nd meeting on January 26th, he introduced a Soviet Government statement in reference to the proposal of the United States that the Conference adjourn while the Eighteen-Nation Disarmament Committee discusses the question. The statement declared that the Western proposal to end the negotiations came at just the time when there was a proposal before the Conference that could put an end to nuclear testing. It further stated that the Soviet

Government thought worthwhile negotiations could be held and wished to continue the Conference.[197]

The Conference Adjourns

The discussions continued until the 353rd meeting on January 29, 1962, without any apparent change in positions. Therefore, the United States representative proposed at the 353rd meeting that the Conference recess immediately until a common basis for negotiations can be re-established either at the forthcoming meetings of the Eighteen-Nation Disarmament Committee Conference, through diplomatic channels, or through informal contacts among delegations at Geneva.

The representative from the United Kingdom supported the proposal.

The Soviet representative refused to accept the proposal and refused to agree to a recess of the Conference. He was willing to accept a declaration that the Conference had ended on the request of the United States and the United Kingdom. To this proposal the Western representatives refused to agree.

The meeting was finally declared adjourned by the Chairman and left to the next chairman to fix the date of the next meeting in agreement with the other delegations.[198]

Government-sponsored institutions would be used and method to evaluate the conference.[37]

The Conference Officers

The Alternates conferred until the Union adjourned on January 20, 1864, without any regular change in positions. Therefore, the Union Commissioners were ready on the final meeting when the Confederate Commissioners presented a counter-claim for recognition and independent action at the Confederacy's insistence on the supreme-nation principle, involving diplomatic recognition, or foreign internal military assistance or loaves.

The representatives-zero the United Kingdom supported the proposal.

The Lincoln representatives refused to accept the proposal and refused to agree to a cessation of the hostilities. Do was willing to accept a confederation with the Confederate States on the request of the United States and the United Kingdom. In this proposal the Washington representatives refused to accept.

The meeting was finally declared adjourned by the Chairman and left to the next meeting in six the case of the Chief Justice of Confederate States.

XII. SUMMARY

On January 29, 1962, after three hundred and fifty-three meetings that had their beginning on October 31, 1958, the Conference on the Discontinuance of Nuclear Weapon Tests came to a close without reaching agreement. Although not officially closed, no further meetings of the Conference have been called.

The Conference had come about a complete circle; it began with a brief general Soviet proposal to stop all nuclear weapon tests with only a brief token statement about control, and it ended with a Soviet proposal for agreement on a test ban with only national systems for control.

During the course of the negotiations up to about the middle of 1960, a great amount of progress had been made in an attempt to reach agreement on a test ban with effective controls. This can be seen by the number of adopted articles for an agreement in Appendix A. The articles of the treaty that were needed to complete the agreement were small, but the problems involved in these few articles were big. These articles brought forth basic principles on control from which neither side was willing to venture very far.

In the end, it appears that the Soviet Union reached a decision sometime in 1960 that the West would

not move toward their position far enough to bring about agreement and that the Soviet position was the maximum acceptable amount of penetration of the Soviet Union she would accept.

After the summer of 1960, the negotiations took a downhill turn and even with the many proposals put forth by the Western Powers in the early part of 1961, the Soviet Union's position remained firm.

The introduction of the "troika" proposal and the link to general and complete disarmament proposal by the Soviet Union presented further obstacles to reaching agreement and virtually doomed the negotiations. The resumption of nuclear testing by the Soviet Union put the finishing touches on the negotiations.

The November 28, 1961, proposal of the Soviet Union set forth the new Soviet position whereby she still desired a nuclear test ban but would not accept any controls in association with it.

This new Soviet position ran directly contrary to the Western position that any agreement on disarmament must contain effective international control provisions.

Thus, the negotiations had reached another impasse, and the Western Powers decided that until a more favorable negotiating climate could be developed, the negotiations would not have any worthwhile advantage in continuing them.

and have lower their position too much to allow final agreement and that the Soviet position was the maximum concession amount of generosity of the Soviet Union are well known.

After the summer of 1970, the negotiations took a benefit turn and even with the very acceptable and lenient by the Western Powers in the early part of 1971, the Soviet Union's position remained firm.

The introduction of the "Soviet" proposal was the time to general and complete disarmament proposed by the United States-Soviet Further modifies an treaty agreement and strongly denies the negotiations. The re-emphasis of political testing by the Soviet Union put the stalemate results of the negotiations.

The November 16, 1971, proposal of the Soviet Union set forth the new Soviet position whereby was still de-sired a treaty but the world not accept any concessions in association with it.

This was Soviet position and clearly contrary to the Western position that any agreement on disarmament must contain effective international control provisions.

Thus, the negotiations had reached another impasse and the Soviet Union believed that until a more favorable negotiating climate could be developed, the negotiations would not have any successful outcome in resolving the

Therefore, on January 29, 1962, after 353 meetings, the Conference on the Discontinuance of Nuclear Weapon Tests became history.

CHAPTER III - FOOTNOTES

[1]"Statement by President Eisenhower: Experts' Report on Detection of Nuclear Tests, August 22, 1958" and "Statement by the British Government: Experts' Report on Dectection of Nuclear Tests, August 22, 1958," Documents on Disarmament 1945-1959, Vol. II 1957-1959 (Washington: Government Printing Office, 1960), pp. 1111-1113.

[2]"Note From the Soviet Foreign Ministry to the American Embassy: Negotiations on the Suspension of Nuclear Weapons Tests, August 30, 1958," Documents on Disarmament 1945-1959, op. cit., p. 1120.

[3]"Note From the American Embassy to the Soviet Foreign Ministry: Negotiations on the Suspennion of Nuclear Weapons Tests, September 10, 1958," Documents on Disarmament 1945-1959, op. cit., pp. 1126-1127.

[4]"Statement by President Eisenhower Regarding Recent Soviet Nuclear Tests, November 7, 1958," Documents on Disarmament 1945-1959, op. cit., p. 1221.

[5]Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of First Meeting, GEN/DNT/PV-1, October 31, 1958, pp. 25-27.

[6]Ibid., pp. 11-21, 28-31.

[7]Ibid., Verbatim Transcript of Fifteenth Meeting, GEN/DNT/PV-15, November 29, 1958, pp. 15.

[8]Ibid., Verbatim Transcript of Eighth Meeting, GEN/DNT/PV-8, November 13, 1958, pp. 5-8.

[9]Ibid., Verbatim Transcript of Fifth Meeting, GEN/DNT/PV-5, November 6, 1958, pp. 4-5; and Verbatim Transcript of Thirteenth Meeting, November 25, 1958, pp. 3-5.

[10]Ibid., Verbatim Transcript of Firteenth Meeting, op. cit., pp. 3-12.

[11]Ibid., Verbatim Transcript of Seventeenth Meeting, GEN/DNT/PV-17, December 2, 1958, pp. 5-7.

[12]Ibid., Verbatim Transcript of Twenty-first Meeting, GEN/DNT/PV-21, December 8, 1958, pp. 20-38.

[13] Ibid., Verbatim Transcript of Twenty-Third Meeting, GEN/DNT/PV-23, December 11, 1958, pp. 4-6.

[14] Ibid., Verbatim Transcript of Twenty-Fourth Meeting, GEN/DNT/PV-24, December 12, 1958, pp. 3-9.

[15] See Appendix A for full text.

[16] Ibid.

[17] Ibid.

[18] Ibid.

[19] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Twenty-Ninth Meeting, GEN/DNT/PV-29, January 5, 1959, pp. 10.

[20] Ibid., pp. 11-14.

[21] Ibid., Verbatim Transcript of Thirty-First Meeting, GEN/DNT/PV-31, January 7, 1959, pp. 22-29.

[22] Ibid., Verbatim Transcript of Forty-First Meeting, GEN/DNT/PV-41, January 23, 1959, pp. 3-5.

[23] Ibid., Verbatim Transcript of Thirty-seventh Meeting, GEN/DNT/PV-37, January 19, 1959, pp. 10.

[24] Ibid., Verbatim Transcript of Forty-Fourth Meeting, GEN/DNT/PV-44, January 28, 1959, p. 3.

[25] Ibid., Verbatim Transcript of Forty-Fourth Meeting, op. cit., pp. 3-7.

[26] Ibid., pp. 9-17.

[27] Ibid., Verbatim Transcript of Forty-fifth Meeting, GEN/DNT/PV-45, January 29, 1959, pp. 19-21.

[28] Ibid., Verbatim Transcript of Forty-eighth Meeting, GEN/DNT/PV-48, February 3, 1959, p. 11.

[29] Ibid., Verbatim Transcript of Thirty-eighth Meeting, GEN/DNT/PV-38, January 20, 1959, pp. 3-6.

[30] Ibid., Verbatim Transcript of Forty-second Meeting, GEN/DNT/PV-42, January 26, 1959, pp. 3-4, 20-31.

[31] Ibid., Verbatim Transcript of Thirty-eighth Meeting, GEN/DNT/PV-38, January 20, 1959, pp. 12-13.

[32] Ibid., Verbatim Transcript of Forty-second Meeting, op. cit., pp. 12-17.

[33] Ibid., Verbatim Transcript of Forty-seventh Meeting, GEN/DNT/PV-47, February 2, 1959, pp. 3-4.

[34] Ibid., Verbatim Transcript of Forty-sixth Meeting, GEN/DNT/PV-46, January 30, 1959, p. 30.

[35] Ibid., Verbatim Transcript of Sixty-eighth Meeting, GEN/DNT/PV-68, March 5, 1959, p. 6.

[36] Ibid., pp. 10-11.

[37] Ibid., Verbatim Transcript of Forty-sixth Meeting, op. cit., p. 32.

[38] Ibid., Verbatim Transcript of Forty-seventh Meeting, op. cit., p. 8.

[39] Ibid., p. 19.

[40] Ibid., Verbatim Transcript of Forty-ninth Meeting, GEN/DNT/PV-49, February 5, 1959, pp. 7-12.

[41] Ibid., p. 6.

[42] Ibid., Verbatim Transcript of Sixty-fifth Meeting, GEN/DNT/PV-65, March 2, 1959, pp. 16-17.

[43] Ibid., Verbatim Transcript of Sixty-seventh Meeting, GEN/DNT/PV-67, March 4, 1959, pp. 11-16.

[44] Ibid., Verbatim Transcript of Forty-sixth Meeting, op. cit., pp. 8-10.

[45] Ibid., p. 13.

[46] Ibid., Verbatim Transcript of Sixtieth Meeting, GEN/DNT/PV-60, February 23, 1959, pp. 28-34.

[47] Ibid., Verbatim Transcript of Fifty-second Meeting, GEN/DNT/PV-52, February 11, 1959, p. 20.

[48] Ibid., Verbatim Transcript of Sixty-fifth Meeting, op. cit., pp. 3-5.

[49] Ibid., Verbatim Transcript of Sixty-seventh Meeting, op. cit., p. 15.

[50] For full text see Appendix A.

[51] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Seventy-third Meeting, GEN/DNT/PV-73, April 13, 1959, pp. 3-6.

[52] Ibid., pp. 15-16.

[53] Ibid., Verbatim Transcript of Eighty-third Meeting, GEN/DNT/PV-83, April 27, 1959, pp. 3-5.

[54] Ibid., p. 10.

[55] Ibid., p. 15.

[56] Ibid., Verbatim Transcript of Eighty-fourth Meeting, GEN/DNT/PV-84, April 28, 1959, pp. 10-11.

[57] Ibid., Verbatim Transcript of Eighty-ninth Meeting, GEN/DNT/PV-89, May 8, 1959, pp. 6-7.

[58] Ibid., Verbatim Transcript of Seventy-fifth Meeting, GEN/DNT/PV-75, April 15, 1959, pp. 3-5.

[59] For full texts of above articles see Appendix A.

[60] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Eightieth Meeting, GEN/DNT/PV-80, p. 30. The U.S. representative requested a recess because of the impending Geneva meeting of Foreign Ministers to be held on May 14, 1959.

[61] "Letter from the Soviet Premier (Khrushchev) to President Eisenhower Regarding Nuclear Test Suspension, May 14, 1959," Documents on Disarmament 1945-1959, Vol. II 1957-1959, op. cit. pp. 1409-1411.

[62] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Ninety-fifth Meeting, GEN/DNT/PV-95, June 15, 1959, pp. 3-10.

[63] Ibid., Report of the Technical Working Group on the Detection and Identification of High-Altitude Nuclear Explosions, July 10, 1959, GEN/DNT/63, July 10, 1959, pp. 8-10.

[64] Conference on the Discontinuance of Nuclear

Weapon Tests, Verbatim Transcript of One Hundred and Twenty-first Meeting, GEN/DNT/PV-121, August 10, 1959, p. 10.

[65] Ibid., p. 13.

[66] Ibid., Verbatim Transcript of One Hundred and Twenty-seventh Meeting, GEN/DNT/PV-127, August 26, 1959, pp. 4-5.

[67] Ibid., p. 5.

[68] Ibid., Verbatim Transcript of Ninety-fourth Meeting, GEN/DNT/PV-94, June 12, 1959, pp. 24-31.

[69] Ibid., p. 36.

[70] Ibid., Verbatim Transcript of Ninety-seventh Meeting, GEN/DNT/PV-97, June 17, 1959, pp. 23-24.

[71] Ibid., Verbatim Transcript of One Hundred and Eighth Meeting, GEN/DNT/PV-108, July 9, 1959, pp. 3-4; and GEN/DNT/66.

[72] Ibid., Verbatim Transcript of Ninety-sixth Meeting, GEN/DNT/PV-96, June 16, 1959, p. 7.

[73] Ibid., Verbatim Transcript of One Hundredth Meeting, GEN/DNT/PV-100, June 22, 1959, p. 8.

[74] Ibid., p. 14.

[75] Ibid., Verbatim Transcript of One Hundred and Thirteenth Meeting, July 20, 1959, pp. 1-6.

[76] Ibid., p. 14.

[77] Ibid., Verbatim Transcript of One-Hundred-and-Fourteenth Meeting, GEN/DNT/PV-114, July 24, 1959, pp. 10-12.

[78] Ibid., Verbatim Transcript of One-Hundred-and-Fifteenth Meeting, GEN/DNT/PV-115, July 27, 1959, pp. 4-6; and GEN/DNT/66.

[79] Supra., pp. 44-45.

[80] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of One-Hundred-and-Fifth Meeting, GEN/DNT/PV-105, June 30, 1959, p. 9.

[81] Ibid., Verbatim Transcript of Sixty-fifth Meeting, op. cit., p. 16.

[82] Ibid., Verbatim Transcript of One-Hundred and Seventh Meeting, GEN/DNT/PV-107, July 6, 1959, pp. 3-10.

[83] Ibid., Verbatim Transcript of One-Hundred-and-Twelfth Meeting, GEN/DNT/PV-112, July 17, 1959, pp. 5-7.

[84] Ibid., Verbatim Transcript of One Hundred and Twenty-Second Meeting, GEN/DNT/PV-122, August 11, 1959, pp. 14-15.

[85] Ibid., Verbatim Transcript of One Hundred and Twenty-Eighth Meeting, GEN/DNT/PV-128, October 27, 1959, pp. 5-13.

[86] Ibid., Verbatim Transcript of One Hundred and Thirtieth Meeting, GEN/DNT/PV-130, October 29, 1959, pp. 12-16.

[87] Ibid., Verbatim Transcript of One Hundred and Thirty-seventh Meeting, GEN/DNT/PV-137, November 24, 1959, p. 14.

[88] Ibid., Verbatim Transcript of One Hundred and Fiftieth Meeting, GEN/DNT/PV-150, December 19, 1959, pp. 3-4.

[89] Ibid., pp. 5-16.

[90] Ibid., pp. 18-19.

[91] Supra p. 29; and Conference on the Discontinuance of Nuclear Weapon Tests, GEN/DNT/21, GEN/DNT/58 and GEN/DNT/59.

[92] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of One Hundred and Forty-first Meeting, GEN/DNT/PV-141, December 1, 1959, pp. 10-13.

[93] Ibid., Verbatim Transcript of One Hundred and Forty-Second Meeting, GEN/DNT/PV-142, December 3, 1959, pp. 25-32.

[94] Ibid., Verbatim Transcript of One Hundred and Forty-Third Meeting, GEN/DNT/PV-143, December 4, 1959, pp. 3-9.

[95] Ibid., Verbatim Transcript of One Hundred and

Forty-Sixth Meeting, GEN/DNT/PV-146, December 10, 1959, p. 7.

[96] Ibid., Verbatim Transcript of One Hundred and Forty-Seventh Meeting, GEN/DNT/PV-147, December 11, 1959, pp. 8-13.

[97] Ibid., Verbatim Transcript of One Hundred and Forty-Eighth Meeting, GEN/DNT/PV-148, December 14, 1959, pp. 6-15.

[98] Ibid., pp. 15-16.

[99] Ibid., p. 17.

[100] Ibid., Verbatim Transcript of the One Hundred and Fortieth Meeting, GEN/DNT/PV-140, November 30, 1959, p. 13. For full text see Appendix A.

[101] Ibid., Verbatim Transcript of One Hundred and Fifty-first Meeting, GEN/DNT/PV-151, January 12, 1960, pp. 6-10.

[102] Ibid., Verbatim Transcript of One Hundred and Fifty-second Meeting, GEN/DNT/PV-152, January 13, 1960, pp. 7-12.

[103] Ibid., Verbatim Transcript of One Hundred and Seventieth Meeting, GEN/DNT/PV-170, February 11, 1960, pp. 5-8.

[104] Ibid., p. 10.

[105] Ibid., pp. 14 and 26.

[106] Ibid., Verbatim Transcript of One Hundred and Seventy-second Meeting, GEN/DNT/PV-172, February 16, 1960, pp. 6-7.

[107] Ibid., Verbatim Transcript of One Hundred and Seventy-third Meeting, GEN/DNT/PV-173, February 17, 1960, p. 8.

[108] Ibid., Verbatim Transcript of One Hundred and Eightieth Meeting, GEN/DNT/PV-180, March 2, 1960, pp. 7-9.

[109] Ibid., Verbatim Transcript of One Hundred and Eighty-eighth Meeting, GEN/DNT/PV-188, March 19, 1960, pp. 13-14.

[illegible] Meeting, [illegible], November 10, 1970, p. 7.

[illegible] Transcripts of the Meeting and Forty-seventh Meeting, [illegible], December 11, 1970, pp. 8-12.

[illegible] Verbatim Transcripts of the Meeting and Forty-eighth Meeting, [illegible], December 12, 1970, pp. 8-12.

[illegible], pp. 12-13.

[illegible], p. 17.

[illegible] Verbatim Transcripts of the Meeting and Fortieth Meeting, [illegible], November 20, 1970, p. 1, for this and the Appendix.

[illegible] Verbatim Transcripts of the Meeting and Fifty-first Meeting, [illegible], January 12, 1971, pp. 8-12.

[illegible] Verbatim Transcripts of the Meeting and Fifty-second Meeting, [illegible], January 13, 1971, pp. 1-12.

[illegible] Verbatim Transcripts of the Meeting and Seventieth Meeting, [illegible], February 22, 1972, pp. 8-9.

[illegible], p. 26.

[illegible], pp. 24 and 26.

[illegible] Transcripts of the Meeting and Seventy-second Meeting, [illegible], February 16, 1972, pp. 8-9.

[illegible] Transcripts of the Meeting and Seventy-third Meeting, [illegible], February 17, 1972, p. 8.

[illegible] Transcripts of the Meeting and Eighteenth Meeting, [illegible], [illegible] 1, 1969, pp. [illegible].

[illegible] Transcripts of the Meeting and Eighty-sixth Meeting, [illegible], March 16, 1973, pp. 14-15.

[110] Ibid., pp. 15-16.

[111] Ibid., Verbatim Transcript of One-Hundred-and-Eighty-Ninth Meeting, GEN/DNT/PV-189, March 21, 1960, pp. 10-12.

[112] "Joint Declaration by President Eisenhower and Prime Minister Macmillan on Nuclear Tests, March 29," Documents on Disarmament 1960 (Washington: Government Printing Office, 1961), pp. 77-78.

[113] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of One Hundred and Ninety-first Meeting, GEN/DNT/PV-191, March 31, 1960, pp. 3-6.

[114] Ibid., Verbatim Transcript of One Hundred and Ninety-fourth Meeting, GEN/DNT/PV-194, April 6, 1960, pp. 4-9.

[115] Supra, pp. 9-10.

[116] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of One Hundred and Sixty-sixth Meeting, GEN/DNT/PV-166, February 4, 1960, p. 3.

[117] Ibid., Verbatim Transcript of One-Hundred-and-Eighty-fifth Meeting, GEN/DNT/PV-185, March 14, 1960, p. 4.

[118] Ibid., p. 13.

[119] Ibid., pp. 14-15.

[120] Ibid., Verbatim Transcript of One Hundred and Fifth-fifth Meeting, GEN/DNT/PV-155, January 18, 1960, p. 5.

[121] Ibid., p. 6.

[122] Ibid., Verbatim Transcript of One Hundred and Sixty-Third Meeting, GEN/DNT/PV-163, February 1, 1960, p. 17.

[123] Ibid., Verbatim Transcript of One Hundred and Ninety-Seventh Meeting, GEN/DNT/PV-197, April 13, 1960, pp. 3-8.

[124] Ibid., Verbatim Transcript of Two Hundred and Second Meeting, GEN/DNT/PV-202, May 3, 1960, pp. 3-5.

[illegible]

[illegible]

[illegible]

[125] Ibid., Verbatim Transcript of Two Hundred and Sixth Meeting, GEN/DNT/PV-206, May 27, 1960, pp. 8-9.

[126] Ibid., Verbatim Transcript of Two Hundred and Eighth Meeting, GEN/DNT/PV-208, June 2, 1960, pp. 7-8.

[127] Ibid., Verbatim Transcript of Two Hundred and Fourteenth Meeting, GEN'DNT/PV-214, June 15, 1960, p. 7.

[128] Ibid., Verbatim Transcript of Two Hundred and Twenty-seventh Meeting, GEN/DNT/PV-227, July 12, 1960, p. 11.

[129] Ibid., Verbatim Transcript of Two Hundred and Thirty-Seventh Meeting, GEN/DNT/PV-237, August 2, 1960, pp. 3-10.

[130] Ibid., Verbatim Transcript of Two Hundred and Twenty-eighth Meeting, GEN/DNT/PV-228, July 13, 1960, pp. 5-6.

[131] Supra, pp. 78-79.

[132] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Two Hundred and Thirty-fourth Meeting, GEN/DNT/PV-234, July 26, 1960, pp. 10-15.

[133] Ibid., pp. 15-17.

[134] Ibid., Verbatim Transcript of Two Hundred and Thirty-sixth Meeting, GEN/DNT/PV-236, August 1, 1960, pp. 3-14.

[135] Supra, pp. 88-90.

[136] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Two Hundred and Fifth Meeting, GEN/DNT/PV-205, May 12, 1960, p. 5.

[137] Ibid., Verbatim Transcript of Two Hundred and Seventeenth Meeting, GEN/DNT/PV-217, June 22, 1960, pp. 22-27.

[138] Ibid., Verbatim Transcript of Two Hundred and Twenty-eighth Meeting, GEN/DNT/PV-228, July 13, 1960, p. 7.

[139] Ibid., Verbatim Transcript of Two Hundred and Forty-first Meeting, GEN/DNT/PV-241, August 11, 1960, pp. 12-19.

[1]Ibid., Variable Transmission of the Heating and Ventilating Section, CONFIDENTIAL-CD, May 27, 1960, pp. 2-3.

[2]Ibid., Variable Transmission of the Cooling and Ventilating Section, CONFIDENTIAL-CD, June 2, 1960, pp. 1-2.

[3]Ibid., Variable Transmission of the Heating and Pressurized Section, CONFIDENTIAL-CD, June 13, 1960, p. 1.

[4]Ibid., Variable Transmission of the Heating and Power-Control Section, CONFIDENTIAL-CD, July 12, 1960, p. 12.

[5]Ibid., Variable Transmission of the Heating and Pressure-Control Section, CONFIDENTIAL-CD, August 1, 1960, pp. 2-20.

[6]Ibid., Variable Transmission of the Heating and Power-Control Section, CONFIDENTIAL-CD, July 22, 1960, pp. 2-3.

[7]Ibid., pp. 7a-7b.

[8]Conference on the Discontinuance of Nuclear Weapon Tests, Variable Transmission of the Heating and Power-Control Section, CONFIDENTIAL-CD, May 27, 1960, p. 1.

[9]Ibid., pp. 12-20.

[10]Conference on the Discontinuance of Nuclear Weapon Tests, Variable Transmission of the Heating and Power-Control Section, CONFIDENTIAL-CD, May 27, 1960, p. 2.

[11]Ibid., Variable Transmission of the Heating and Power-Control Section, CONFIDENTIAL-CD, June 22, 1960, pp. 2-3.

[12]Ibid., Variable Transmission of the Heating and Power-Control Section, CONFIDENTIAL-CD, July 22, 1960, pp. 2-7.

[13]Ibid., Variable Transmission of the Heating and Pressure-Control Section, CONFIDENTIAL-CD, August 11, 1960, pp. 12-19.

[140] Supra, p. 29.

[141] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Two Hundred and Sixteenth Meeting, GEN/DNT/PV-216, June 21, 1960, pp. 4-6.

[142] Ibid., Verbatim Transcript of Two Hundred and Twenty-fifth Meeting, GEN/DNT/PV-225, July 6, 1960, p. 6.

[143] Ibid., Verbatim Transcript of Two Hundred and Thirtieth Meeting, GEN/DNT/PV-230, July 15, 1960, pp. 3-6.

[144] Ibid., Verbatim Transcript of Two Hundred and Thirty-ninth Meeting, GEN/DNT/PV-239, August 5, 1960, pp. 4-9.

[145] Ibid., Verbatim Transcript of Two Hundred and Third Meeting, GEN/DNT/PV-203, May 9, 1960, pp. 16-21.

[146] Ibid., pp. 27-33.

[147] Ibid., Verbatim Transcript of Two Hundred and Fifteenth Meeting, GEN/DNT/PV-215, June 20, 1960, pp. 3-8.

[148] Ibid., Verbatim Transcript of Two Hundred and Seventeenth Meeting, op. cit., pp. 6-16.

[149] Ibid., Verbatim Transcript of Two Hundred and Thirty-fifth Meeting, GEN/DNT/PV-235, July 27, 1960, pp. 3-5. For full text see Appendix A.

[150] Ibid., Verbatim Transcript of Two Hundred and Forty-seventh Meeting, GEN/DNT/PV-247, September 27, 1960, pp. 9-10.

[151] Ibid., Verbatim Transcript of Two Hundred and Fiftieth Meeting, GEN/DNT/PV-250, October 5, 1960, pp. 3-10.

[152] Ibid., Verbatim Transcript of Two Hundred and Sixtieth Meeting, GEN/DNT/PV-260, October 27, 1960, pp. 6-9.

[153] Supra, pp. 112-114.

[154] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Two Hundred and Forty-eighth Meeting, GEN/DNT/PV-248, September 29, 1960, pp. 6-11.

[155] Ibid., Verbatim Transcript of Two Hundred and Fifty-Sixth Meeting, GEN/DNT/PV-256, October 19, 1960, pp. 4-11.

[156] Ibid., Verbatim Transcript of Two Hundred and Sixty-eighth Meeting, GEN/DNT/PV-268, November 21, 1960, pp. 12-13; and Verbatim Transcript of Two Hundred and Seventieth Meeting, GEN/DNT/PV-270.

[157] Supra, p. 115.

[158] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Two Hundred and Fifty-Seventh Meeting, GEN/DNT/PV-257, October 20, 1960, pp. 4-7.

[159] Ibid., pp. 8-14.

[160] Ibid., Verbatim Transcript of Two Hundred and Seventy-fourth Meeting, GEN/DNT/PV-274, March 21, 1961, pp. 3-16. "Troika," a Russian word meaning three-horse team or three-man group, has been used to describe the tripartite organ proposed by the Soviet Union.

[161] Ibid., Verbatim Transcript of the Two Hundred and Eighty-first Meeting, GEN/DNT/PV-281, March 30, 1961, pp. 9-13.

[162] Ibid., Verbatim Transcript of Two Hundred and Ninety-fourth Meeting, GEN/DNT/PV-294, April 20, 1961, pp. 6-13.

[163] Ibid., Verbatim Transcript of Two Hundred and Ninety-seventh Meeting, GEN/DNT/PV-297, April 25, 1961, pp. 16-23.

[164] Ibid., Verbatim Transcript of Two Hundred and Ninety-Ninth Meeting, GEN/DNT/PV-299, April 27, 1961, pp. 7-17.

[165] Supra, p. 112.

[166] Supra, p. 112.

[167] Conference on the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of Two Hundred and Seventy-fourth Meeting, op. cit., pp. 16-27.

[168] Ibid., Verbatim Transcript of Two Hundred and Seventy-fifth Meeting, GEN/DNT/PV-275, March 22, 1961, pp. 3-8.

[169] Ibid., Verbatim Transcript of Two Hundred and Seventy-eighth Meeting, GEN/DNT/PV-278, March 27, 1961, pp. 3-16.

[170] Ibid., Verbatim Transcript of Two Hundred and Seventy-ninth Meeting, GEN/DNT/PV-279, March 28, 1961, pp. 3-13.

[171] Ibid., Verbatim Transcript of Two Hundred and Eightieth Meeting, GEN/DNT/PV-280, March 29, 1961, pp. 3-7.

[172] Ibid., Verbatim Transcript of Two Hundred and Eighty-second Meeting, GEN/DNT/PV-282, April 4, 1961, pp. 5-10.

[173] Ibid., Verbatim Transcript of Two Hundred and Eighty-sixth Meeting, GEN/DNT/PV-286, April 10, 1961, pp. 8-10.

[174] Ibid., Verbatim Transcript of Two Hundred and Eighty-seventh Meeting, GEN/DNT/PV-287, April 11, 1961, pp. 3-11.

[175] Ibid., Verbatim Transcript of Two Hundred and Ninety-Eighth Meeting, GEN/DNT/PV-298, April 26, 1961.

[176] Ibid., Verbatim Transcript of Two Hundred and Ninety-second Meeting, GEN/DNT/PV-292, April 18, 1961, pp. 3-4.

[177] Ibid., Verbatim Transcript of Two Hundred and Ninety-third Meeting, GEN/DNT/PV-293, April 19, 1961, pp. 3-10.

[178] Ibid., Verbatim Transcript of Two Hundred and Ninety-sixth Meeting, GEN/DNT/PV-296, April 24, 1961, pp. 3-6.

[179] Ibid., Verbatim Transcript of Three Hundred and Tenth Meeting, GEN/DNT/PV-310, May 25, 1961.

[180] Ibid., Verbatim Transcript of Three Hundred and Eleventh Meeting, GEN/DNT/PV-311, May 29, 1961, pp. 6-7.

[181] Ibid., Verbatim Transcript of Three Hundred and Thirteenth Meeting, GEN/DNT/PV-313, May 31, 1961, pp. 12-15.

[182] Ibid., Verbatim Transcript of Three Hundred and Seventeenth Meeting, GEN/DNT/PV-317, June 12, 1961, pp. 6-13.

[183] Ibid., Verbatim Transcript of Three Hundred and Thirty-seventh Meeting, GEN/DNT/PV-337, August 28, 1961, pp. 6-13.

[184] Ibid., pp. 19-20.

[185] Ibid., Verbatim Transcript of Three Hundred and Thirty-eighth Meeting, GEN/DNT/PV-338, August 30, 1961.

[186] Ibid., pp. 23.

[187] Ibid., Verbatim Transcript of Three Hundred and Thirty-Ninth Meeting, GEN/DNT/PV-339, September 4, 1961, pp. 3-9.

[188] Ibid., pp. 13-26.

[189] Ibid., Verbatim Transcript of Three Hundred and Fortieth Meeting, GEN/DNT/340, September 9, 1961, pp. 3-12.

[190] Ibid., pp. 12-16.

[191] Ibid., Verbatim Transcript of Three Hundred and Forty-first Meeting, GEN/DNT/PV-341, November 20, 1961, pp. 12-24.

[192] Ibid., pp. 25-31.

[193] Ibid., pp. 31-35.

[194] Ibid., Verbatim Transcript of Three Hundred and Forty-Fourth Meeting, GEN/DNT/PV-344, December 5, 1961, pp. 3-5.

[195] Ibid., Verbatim Transcript of Three Hundred and Fiftieth Meeting, GEN/DNT/PV-350, January 16, 1962, pp. 3-9.

[196] Ibid., pp. 9-16.

[197] Ibid., Verbatim Transcript of Three Hundred and Fifty-Second Meeting, GEN/DNT/PV-352, January 26, 1962, pp. 3-7.

[198] Ibid., Verbatim Transcript of Three Hundred and Fifty-third Meeting, GEN/DNT/PV-352, January 29, 1962, pp. 3-35.

CHAPTER IV

CONFERENCE OF THE EIGHTEEN-NATION COMMITTEE ON DISARMAMENT MARCH 14, 1962 - JUNE 21, 1963

I. BACKGROUND

After the Conference on Discontinuance of Nuclear Weapon Tests adjourned on January 29, 1962, after failure to reach a negotiable position, a series of private notes and talks transpired between the nuclear powers; and it was finally agreed that the nuclear weapons test ban issue be included in the discussions of the proposed Conference of the Eighteen-Nation Committee on Disarmament. This Committee was established after a series of notes and discussions between the United States and the Soviet Union as a forum for the discussion of general and complete disarmament and was scheduled to convene on March 14, 1962, in Geneva, Switzerland.

The eighteen members were selected from five North Atlantic Treaty Organization members, five Warsaw Pact members, and eight non-nuclear, non-aligned States. Thus, the members of the Committee for the forthcoming Conference were: the United States, the United Kingdom, Italy, Canada and France--the North Atlantic Treaty Organization members;

the Soviet Union, Czechoslovakia, Rumania, Poland, and Bulgaria--the Warsaw Pact members; Brazil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden, and the United Arab Republic--the non-nuclear and non-aligned members. France declined to attend the Conference because she believed that only nuclear powers could take positive steps towards worthwhile disarmament measures.

II. THE FIRST PERIOD MARCH 14, 1962 - JUNE 15, 1962

Introduction

The Conference of the Eighteen-Nation Committee on Disarmament convened on schedule on March 14, 1962. They held fifty-six meetings in private session until the Conference recessed on June 15th. Also, during this period, the Subcommittee on the Discontinuance of Nuclear Weapon Tests was established with the United States, the Soviet Union, and the United Kingdom as members. The Subcommittee held eighteen meetings during this period.

Although the Conference was called a conference on disarmament, the majority of the time was spent on the nuclear weapons test ban issue. The positions of both sides was well aired and the non-aligned members contributed to the discussion with the Eight-Nation memorandum on April 16, 1962.

the Soviet Union, Czechoslovakia, Romania, Poland, and Bulgaria--the Vietnam War protest Israel, Korea, Bolivia, Cuba, Mexico, France, Germany, and the United Arab Republic--the non-aligned or non-aligned members. Iranian declined to attend the conference because the United States had only nuclear power could take qualitative steps towards disarmament measures.

III. THE FIRST NUCLEAR WATER SUMMIT

-THE IAEA 1964

Introduction

The Conference of the Disarmament Committee on Disarmament convened in Geneva on March 19, 1964. They said disarmament measures to prevent further nuclear weapons tests and the Conference treaties on June 12th. Later, during this period, the Conference in the Disarmament Committee on nuclear weapons tests was discussed with the United States, the Soviet Union, and the United Kingdom as members. The Conference said nuclear weapons testing and testing.

Activity the Conference was called a conference on disarmament. The majority of the time was spent on the nuclear weapons test ban treaty. The negotiations on these sides was well under way and the nuclear weapons-free zones to the Scandinavian with the disarmament measures on April 19, 1964.

Opening Debate

After procedural matters had been attended to, the Conference began to hear opening statements; and it became immediately clear that the major issue would be the question of the nuclear weapons test ban.

At the second meeting, the Soviet representative criticized the United States for deciding to resume atmospheric testing in the latter part of April and further stated that the Soviet Union would reply in kind.

The United States representative in his opening remarks said that the United States was prepared to make every reasonable effort to reach agreement on a nuclear weapons test ban agreement. He added,

> I had expected that a number of representatives might express here their regrets that the Soviet Union and the United States had resumed nuclear testing. But I had supposed that there was one delegation - that of the Soviet Union - which could not have found it possible to criticize the United States for doing so.[1]

The other representatives in their opening remarks also called for renewed efforts to reach agreement on a nuclear weapons test ban. The Indian representative suggested an alternate approach to the problem. He suggested that

> If the idea is that one cannot take for granted the results of the detection efforts by any one of the three countries involved in this matter - that is to say, if the United States is not prepared to accept the judgment on this score of the United Kingdom or the Soviet Union, or the other way round -

> it may be worth considering whether scientic detection stations could be established by national efforts in other countries or could be internationally established. If it is possible to aprear bases all round the world to manufacture these weapons, it should also be possible to establish these pesce stations in various parts of the world, in countries, that are only partly committed or are uncommitted to the two blocs. Then, in the event of an explosion, the results would come in from everywhere.

He contended that the problem is one of detecting nuclear explosions and that detection would establish proof of violation of a test-ban agreement. He added, "there had to be agreement, but agreements cannot be left to trust."[2]

The Ethiopian representative suggested an international scientific system of verification to resolve differences in results of national detection systems.[3]

Establishment of a Subcommittee on a Treaty for the Discontinuance of Nuclear Weapons Tests

On March 21, 1962, at the 6th meeting of the Conference, they approved the establishment of a Subcommittee on a Treaty for the Discontinuance of Nuclear Weapons Tests composed of the United States, the Soviet Union, and the United Kingdom. The subcommittee would pursue private talks towards reaching agreement on a Treaty for the Discontinuance of Nuclear Weapon Tests.

Subcommittee meetings. At the first meeting of the subcommittee, the Western representatives introduced a

proposal to amend the Western draft treaty of April 10, 1961, as amended on May 29, 1961 and August 30, 1961.[4] The proposed amendments were:

> 1. Provisions for safeguarding other States against the consequences of preparations for testing. This would consist, in large part, of declarations on the part of heads of States that there will be no preparations for testing, and agreed rights to inspect, a certain number of times per year, equal numbers of declared sites on each side.
> 2. Provisions to shorten the time spent before the beginning of the inspection process. This would primarily be a question of the way the preparatory commission functioned and agreement to cooperate in speeding up, by all possible means, the establishment of detection facilities including temporary control posts.
> 3. Provisions to make the treaty comprehensive from the outset. This would mean, in essence, reduction to zero of the present threshold of 4.75 degrees seismic magnitude.
> 4. Provisions to allocate an agreed limited number of inspections within the inspection quota to zones which had normally little seismic activity.[5]

The Soviet representative rejected the new Western proposal and accused the West of submitting proposals that they knew were not acceptable. He reaffirmed the Soviet proposal of November 28, 1961, as the only basis for agreement and repeated the argument that national systems were now capable of detecting any explosion in any environment.[6]

On March 22nd at the 2nd Subcommittee meeting, the United Kingdom declared that the Western Powers were prepared to negotiate on the Western draft treaty as modified or

> we are ready to do more than that; we are ready to scrap our draft treaty completely and to start all

> over again. We only ask that a nuclear test ban agreement should provide for some adequate measure, a minimum measure of international verification.[7]

The Soviet representative refused to be swayed by any arguments that the Western representatives put forward and repeated his arguments on the appropriateness of the Soviet proposal of November 28th for a complete ban on nuclear weapons tests and reliance on national detection systems which he declared were now completely adequate.[8]

Subcommittee deadlocked. On March 22nd, the Subcommittee submitted their report to the Conference and declared that they had been unable to report any progress in reaching agreement.

Deadlock continues but positions aired. The Subcommittee reconvened on March 28th, but there was no change in positions and the deadlock continued. However, certain points were aired that set forth the basic positions clearer.

The Soviet argument boiled down to that she could not accept controls and inspection without genuine disarmament because it would be nothing but a disguise for espionage which would be a threat to her national security. The Soviet representative argued that because there had not been any complaints or accusations from the Western Powers during the moratorium, this proves the adequacy of national detection systems.

The United States representative in reply to the Soviet argument that there had not been any Western complaints during the moratorium and thus proves the effectiveness of national systems said,

> . . . the fact is that although we in the United States knew that the United States itself was not conducting any nuclear tests we did not know at all what was taking place on the territory of the Soviet Union . . . . Yes, indeed, our scientists did record hundreds of seismic or acoustic signals during those three years of negotiation, and some of them may have looked as if they could have been caused by a secret underground nuclear detonation, or perhaps by very heavy chemical explosions, or perhaps by earthquakes. But how could we say anything at all! We had no data enabling us to identify one detected signal from another as a nuclear explosion; we had no right whatsoever to seek an on-site inspection; we did not wish to voice suspicions in a way that might interfere with the test ban negotiations. So we had to keep our silence, with our many unconfirmed suspicions some of which did emerge in the press or in public statements by private individuals . . . .
>
> I submit that nothing could prove more clearly the need for an international control system, for whether the Soviet Union was or was not testing, many people in the United States believed that during this period the Soviet Union was secretly testing, and all we, the Government, could say was that we had no evidence.[9]

Discussion of the Nuclear Weapons Test Ban Shifts to the Conference

With continued deadlock in the Subcommittee, discussion on the test ban issue shifted to the Conference.

At the 13th and 14th Meetings of the Conference, the non-aligned members of the committee kept the attention of the Conference on the nuclear weapons test ban issue and proposed several methods of breaking the continuing deadlock.

The Burmese representative proposed that a more simple system could be used, eliminating international control posts from the territories that object to them but retaining the right of conducting an agreed number of properly safeguarded on-site inspections by an international control organization.[10]

The Swedish representative recommended further use of existing scientific establishments which could be coordinated into an international system. Further, he recommended the establishment of a commission composed of prominent scientists to analyze the data received from these stations to determine if a violation had incurred. He also asked that invitational inspection might be the solution if coupled with the right of withdrawal of the other parties if it is refused.[11]

The Mexican representative made a similar recommendation in relation to inspection, but he went further to say that the country concerned would be required to furnish additional reports and data and the control commission should have the right to confirm the data by direct observation.[12]

<u>Summary of the United States position</u>. On April 4th at the 15th meeting of the Conference, the United States representative summarized the present United States position. He stated it as: first, the United States wanted a

test-ban treaty which gave reasonable assurance that all countries were stopping tests and would be unable to resume them without being exposed; second, the United States believed that only an international control system with a network of control posts, aircraft sampling flights, and on-site inspections, together with an internationally organized headquarters offered an adequate technical basis for control; third, only an international system was politically sound, for without it there could be no way to obtain impartial data and settle disputes; fourth, the United States was not wedded to a single formula and was willing to examine all suggestions; fifth, the United States was unable to find any justification for the Soviet rejection of international controls.[13]

Summary of the Soviet Position. The Soviet representative at the ISM meeting also summarized the Soviet position. He stated that the Soviet Union still maintained that national systems of detection and identification were fully sufficient. In relation to the question of on-site inspections, he declared that the Soviet Union would not agree to international inspection of unidentified events on its territory, short of agreement on general and complete disarmament. He then introduced a Soviet Government statement which attributed lack of progress to the resumption of nuclear tests by the United States which was not

"conducive to businesslike negotiations on general and complete disarmament." The statement blamed the Western Powers for the failure of the conference because they refused to acknowledge that national systems were adequate for control and the reluctance of the Western Powers to stop testing.[14]

The Question of Continued Tests and a Moratorium

The conference discussion shifted to consideration of the question of testing by Nuclear Powers while the conference was meeting.

On April 9th, President Kennedy and Prime Minister Macmillan sent a joint letter to Premier Khrushchev which basically stated that if the Soviet Union could not reconsider its position and express a readiness to accept the principle of international verification, then the planned nuclear tests for April would go forward as planned.[15]

On April 12th, Premier Khrushchev replied to the joint letter and accused the Western Powers of trying to force inspection on the Soviet Union for other than control reasons. He reaffirmed the validity of the Soviet proposal of a comprehensive test ban treaty with the use of national systems for verification and control.[16]

Conference discusses the testing issue. On April 12th at the 19th meeting, the non-aligned members of the

Conference called on the Nuclear Powers not to resume testing while the negotiations were continuing.

The Soviet representative announced at the April 12th meeting that the Soviet Union would agree to renounce nuclear testing while negotiations were taking place in the Conference. In concluding his statement, he said "the Soviet Union was ready to consider seriously all the points of view put forward in the present meeting and in the earlier debates on this question." Further he said, the Soviet Union will "ponder all possibilities that may offer themselves in order to insure the signing of a treaty putting an end to all forms of testing of nuclear weapons."[17]

United States rejects new Soviet offer for a moratorium. Also on April 12th, the United States Department of State released a statement rejecting the Soviet offer for a new moratorium and termed it "another unfortunate effort to substitute paper pledges for guaranteed agreements." In rejecting the moratorium, the statement contended that

> the United States does not intend to place its security and the security of its allies at the mercy of Soviet on-again-off-again tactics. We are ready to conclude an effective test ban agreement now. But we cannot be led into another paper pledge which, far from guaranteeing a halt to nuclear testing, would only give rise to a false sense of security and provide yet another opportunity for the Soviet Union to prepare in secret for its own nuclear testing.[18]

The Eight-Nation Memorandum

On April 16th at the 21st meeting of the Conference, the representatives of Brazil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden, and the United Arab Republic introduced a joint memorandum putting forth certain suggestions and ideas for the Nuclear Powers to consider as a possible means of breaking the deadlock that was preventing them from reaching agreement on a nuclear weapons test ban.

The memorandum stated that there were certain areas of agreement as well as existing differences, and these areas of agreement should be explored further and extended. They commended for the consideration of the Nuclear powers the following suggestions and ideas as a means of extending the areas of agreement and to assist them in reaching a final agreement on banning nuclear tests.

> . . . possibilities exist of establishing by agreement a system for continuous observation and effective control on a purely scientific and non-political basis. Such a system might be based and built upon already existing national networks of observation posts and institutions, or if more appropriate, on certain of the existing posts designated by agreement for the purpose together, if necessary, with new posts established by agreement. The existing networks already include in their scientific endeavours the detection and identification of manmade explosions. Improvement could no doubt be achieved by furnishing posts with advance instrumentation . . . .
>
> Furthermore, the feasibility of constituting by agreement an International Commission, consisting of a limited number of highly qualified scientists, possibly from non-aligned countries together with the appropriate staff might be considered. This Commission should be entrusted with the tasks of processing all data received from the agreed system

of observation posts and of reporting on any nuclear explosion or suspicious event on the basis of thorough and objective examination of all the available data. All parties to the treaty should accept the obligation to furnish the Commission with the facts necessary to establish the nature of any suspicious and significant event. Pursuant to this obligation the parties to the treaty could invite the Commission to visit their territories and/or the site of the event the nature of which was in doubt . . . . Should the Commission find that it was unable to reach a conclusion on the nature of a significant event it would so inform the party on whose territory that event had occurred, and simultaneously inform it of the points on which urgent clarification seemed necessary. The Party and the Commission should consult as to what further measures of clarification, including verification in loco, would facilitate the assessment. The party concerned would, in accordance with its obligation referred to . . . above, give speedy and full cooperation to facilitate the assessment.

After full examination of the facts, taking into account any additional data furnished to it as suggested above, the International Commission would inform the parties to the treaty of all the circumstances of the case and of its assessment of the concerned event.

The parties to the Treaty would be free to determine their action with regard to the treaty on the basis of reports furnished by the International Commission . . . .[19]

Western and Soviet Interpretation of the Memorandum

Soviet interpretation. On April 190, the Soviet representative introduced a statement from the Soviet Government welcoming the Eight-Nation proposal. The statement set forth that the Soviet Government interprets the memorandum as involving national networks of detection posts only, plus an international commission which would process and analyze data. As to the question of inviting the international commission to conduct on-site inspections

of suspicious events, the statement said this should be decided by the States themselves. The Soviet Union it said would be willing to study the proposal as a basis for further negotiations and would agree to a moratorium during the negotiations if the West did likewise.[20]

Western interpretation. The representative of the United Kingdom said he interpreted the memorandum to mean that it endorsed the principles of international control and on-site inspection and further that the United Kingdom would accept it as a basis for negotiation if the Soviet Union accepted this interpretation of it.

The United States representative stated that the United States position remained that the international commission must have unquestioned right of inspection. He argued that a State could physically prevent on-site inspection but the legal right of inspection must be recognised. To support this argument he said,

> if there was ambiguity in the treaty on this point, or on the relationship between the international control commission and the several States parties to the treaty, and if the responsibility for the preventing this on-site inspection could not be laid firmly on any party to the treaty this would affect the decision of other parties to consider themselves free of their treaty obligations, and the world would not know precisely what had happened.

In relation to the Soviet statement in reference to the Eight-Nation proposal, the United States representative

remarked, that it appeared that the Soviet Union was willing to negotiate only on those aspects of the proposal that were compatible with their position but to ignore the provisions involving international control and on-site inspection. He added, however, that the United States was willing to use the proposal for further discussions if the Soviet Union did not reject international controls and adequate on-site inspection.

He denied the Soviet claim of the detection and identification capabilities of national systems to monitor all nuclear explosions and requested the Soviet Union to introduce scientific evidence to support their claim.

As to the question of an uncontrolled moratorium, he said,

> the United States was prepared to negotiate on the basis of the principles of the United States/United Kingdom draft treaty and the experts reports of 1958 and 1959, but it would renounce tests only when a sound and reasonable test ban treaty providing for measures of effective international control and adequate and objective scientific on-site inspection, had been signed.[22]

Soviet comments on Western interpretation. The Soviet representative in exercising his right of reply stated that the United States and the United Kingdom were only willing to continue the negotiations if the Soviet Union accepted their conditions. He also charged them with rejecting the Eight-Nation memorandum as a basis for further negotiations. He repeated the Soviet position

that no chance of agreement could come about with nuclear explosions in the background and reaffirmed the Soviet willingness to agree to a moratorium during the negotiations.[23]

Subcommittee Discusses the Eight-Nation Proposal

Despite the apparent difference of interpretation of the Eight-Nation memorandum the Nuclear Powers agreed to discuss the memorandum in the Subcommittee.

At the 9th meeting of the Subcommittee on April 20th, the United States representative charged the Soviet Union of unilaterally misinterpreting the Eight-Nation proposal. He added that if progress is to be made, the Western Powers must know whether the Soviet Union was really changing its position and was now willing to accept a properly staffed and financed international control organization and to permit on-site inspection on its territory when requested by the international commission.[24]

The Soviet representative refused to add to the previous Soviet interpretation of the proposal until the Western Powers had accepted the proposal as a basis for negotiation. He accused the Western Powers of maintaining their previous position while considering the new proposal.[25]

At the April 24th meeting of the Subcommittee, the Soviet representative clarified the Soviet view of where

than an change of agreement could come about only with serious questions in the background and reaffirmed the Soviet willingness to agree in a manner that keeps the negotiations.[71]

Recommendations concerning the implementation strategy

Despite the apparent difference of interpretations of the right-to-know measurements the United States should be allowed the measurements if the Soviets.

As the US security of the Administration on April 1971, the United States representatives charged the Soviet Union of unilaterally misinterpreting the [illegible] proposal. He added that if progress is to be made, the Soviets Powers must know whether the Soviet Union was really changing its position and was now willing to accept a generally acceptable and [illegible] [illegible] control negotiations and to provide [illegible] [illegible] [illegible]

the Eight-Nation proposal fit in between the Soviet proposal and the Western proposal. He stated that the Eight-Nation memorandum was a compromise between the Western draft treaty which provided for 12-20 inspections a year and the Soviet proposal of November 28 which proposed none because it proposed inspection by invitation. He continued that the international scientific commission proposed by the memorandum was a compromise between the Western demand for a world network of control posts and the Soviet proposal which relied on national detection systems. He also declared in concluding his statement that the Soviet Union did not object to the creation by agreement of new observation posts to transmit data to the international commission as proposed by the memorandum.[26]

The United States representative also at the April 24th meeting of the Subcommittee clarified the Western interpretation of the Eight-Nation memorandum and said it implied the following verification arrangements:

> 1. Effective detection through an international network of control posts which may be based on existing national systems, supplemented by international stations or a combination of both.
> 2. An international organ or body whose duty will be receiving and processing data from the control posts, and thereafter taking action on the basis of the data it receives and analyzes from this new system of control posts.
> 3. Some effective means of establishing the identity of any detected event where data from the detection apparatus are in themselves inadequate to determine whether a nuclear explosion or a natural event took place; and

> 4. An obligation - I repeat, obligation - on the part of the country on whose territory the unidentified event has taken place to allow this international organ or body the right to identify the event in the only way possible . . . by sending to the territory of the country where the unidentified event has taken place an objective, scientific inspection team which will report back to the international organ or body.

He continued that, although the United States believes that a truly international system of control posts is best, it is prepared to examine the possibility of constructing, on the basis of existing systems,

> an international, supplemented or integrated control post network which will give the necessary degree of assurance and which, through mechanical, technical and other safeguards will also provide reliable scientific and trustworthy data.

In relation to the international scientific or headquarters body, he stated, there was general agreement on this point in the past and there appears to be agreement on this point now. However, he added, this body must be:

> (1) armed with an agreed and objective series of criteria against which to check recorded data from properly placed control posts with appropriate instrumentation in order to determine, wherever possible, that a nuclear test has or has not taken place;
>
> (2) provided with agreed criteria with which to isolate those data which are only indicative of the fact that a test could have taken place, where it is not possible by the use of data from detection systems instrumentation to ensure that a test has not taken place;
>
> (3) equipped with procedures and methods to ensure that the data showing testing could have taken place are adequately investigated so that the true nature of a particular unidentified event is scientifically established; and

(4) staffed with impartial, scientific personnel so that all participating States can have confidence and trust in the objectivity of whatever conclusions the body may draw.

He concluded his statement by summarizing the views of the United States in reference to the issues contained in the Eight-Nation memorandum. He stated these views as: first, there appears to be agreement between the two sides that the memorandum can be an effective and useful document and that it can be one of the basis for further negotiations, but not an exclusive basis; and second, there is also apparent recognition of the necessity of an international network of control posts, the requirement for an international scientific headquarters body, and the need for an effective means to identify certain events which might be nuclear explosions.[27]

The discussions in the Subcommittee continued, but there was no appreciable change in positions in reference to the interpretation of the Eight-Nation memorandum. At the May 3rd Subcommittee meeting, the Soviet representative said that the meetings had reached an impasse because of the Western continued adherence to their old positions on international control and mandatory on-site inspections.[28]

Non-aligned Nations Express their Views on the Impasse

On May 9th at the 34th meeting of the Conference, the

non-aligned members discussed the problem of the impasse in the Subcommittee. They did not offer any interpretation of their memorandum because they felt that this was up to the Nuclear Powers to interpret the memorandum, but they did make some suggestions.

The Mexican representative suggested that the Nuclear Powers study the network of observation posts, the composition of the commission and the principle of international control. He stressed that it was not possible to guarantee treaty observance through coercive means, "the only sanction was moral condemnation by public opinion and the fact that the offended party would automatically consider itself freed from the obligations undertaken under the treaty." He added,

> in view of the situation, it seems to us that it is becoming increasingly urgent and essential every day to draw up an agreement fixing now - I repeat, now - the date for the discontinuance of nuclear tests, even if this cannot be before the conclusion of the series of explosions already begun and before the beginning of the answering series announced by the Soviet Union. The plans of both parties for carrying out explosions must have an end, and this end should be fixed now in a treaty . . . so that this year or the beginning of next year may see a definite end to the senseless nuclear competition.[29]

The Swedish and Indian representatives urged the nuclear powers to stop arguing about interpretation and discuss the issues.[30]

Deadlock Continues in the Subcommittee

On May 11th at the 13th meeting of the Subcommittee, the Soviet representative stated that the Eight-Nation proposal could serve as a framework of agreement and asked the Western representatives to record agreement on the following principles: first, use of existing national detection systems, supplemented where necessary by other observation posts established by agreement; second, on an international commission of scientists with appropriate staff; and third, on inspection by invitation.[31]

The Western representatives refused to agree because they considered this proposal as being too general and unclear, and suggested a meeting of technical experts to discuss the possibilities of national systems and additional observation posts.[32]

The Soviet representative in reply stated that this course would only add to the deadlock. He added that the Soviet Union would agree to set up the international commission if the Western Powers accepted national systems, and they would agree to inspection if the West agreed that it should take place by invitation.

In relation to the question of whether the Soviet Union would, in fact, invite inspection, he replied, "in individual cases scientists belonging to the international

commission should be invited to establish *in loco* the nature of events about which doubt has arisen."[33]

At the final Subcommittee meeting during this period on May 29th, the United States representative summarized the current situation in the negotiations.

He denied the claim of the Soviet Union that existing national systems could detect and identify all nuclear explosions. He analyzed the current Soviet position as using the existing national systems and not supplementing them as had been proposed where necessary. He said it also appears that national systems would only report data to the international commission relating to events considered suspicious by each national system under the Soviet proposal.

In relation to the international commission, he contended that such an international commission under the Soviet proposal would not bother the Soviet Union at all. He pointed out that under the Soviet proposals the commission would simply have to analyze such data as national networks chose to provide and then try to settle any questions by discussion with the party concerned. At most, he continued, a party might "on occasions of its own choosing, decide for its own reasons to invite a few members of the commission to pay what would amount to a purely social visit to some innocuous site."

In conclusion, he said that there was still no clear evidence that the Soviet Union had moved from their November 28, 1961, position.[34]

Summary

On June 15, 1962, the Conference took a recess until July 16, 1962. Before the recess there were several meetings at which the representatives summarized their views on the progress of the Conference. All recognized the value of the Eight-Nation proposal, but there was still a wide difference of opinion in the interpretation of that proposal by the West and the Soviet Union. Although there did not appear to have been any appreciable progress, there had been a wide airing of views which prompted the Eight-Nation Memorandum;and even though the issues remained deadlocked, the positions were more clearly recognized.

Thus, the first period of the Conference of the Eighteen-Nation Committee on Disarmament came to a close after fifty-six plenary sessions and eighteen meetings of the Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests during which the majority of the discussion revolved around the continued quest for a nuclear weapons test ban agreement.

In conclusion, no such [illegible] was still in close relations that the Swiss Union had moved from [illegible] October 28, 1921, publication.[illegible]

Summary

On June 12, 1921, the conference had 2 issues until July 12, 1921. During the [illegible] meetings to which the representatives [illegible] views on the problems of the conference. All [illegible] the value of the [illegible] [illegible], but there was still a wide difference of opinion in the [illegible] of that proposal by the [illegible] [illegible] though there did not [illegible] [illegible] proposal, there had been [illegible] [illegible] [illegible] the issues [illegible] [illegible] [illegible]

III. THE SECOND PERIOD JULY 16, 1962 - SEPTEMBER 7, 1962

Introduction

The second period of the Conference of the Eighteen-Nation Committee on Disarmament commenced when the Conference reconvened on July 16, 1962. Before the Conference recessed on September 7, 1962, twenty-six plenary sessions were held and the Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests held seven formal meetings.

Debate continued in the plenary meetings and the Subcommittee over the interpretation of the Eight-Nation Memorandum. The introduction of two draft treaties, one comprehensive and the other for a partial ban, by the United States and the United Kingdom on August 27, 1962, put the Western position into concise treaty language. The non-aligned members of the Conference continued to put forth various suggestions in an effort to bring the Nuclear Powers together to work towards an acceptable solution of the nuclear weapons test ban issue. As in the first period, the nuclear weapons test ban issue remained the major topic discussed during this period.

United States Introduces Report on Project Vela

On July 16, 1962, at the first plenary meeting of this period, the United States representative introduced

the preliminary findings of Project Vela, the seismic research program carried out by the United States. The United States representative commenting on this preliminary report of the results of the program said,

> the problems involved in this report of research are the central ones in the negotiation of a comprehensive test ban. The questions both of the respective capabilities of distant and close-in instrumentation to detect and identify seismic disturbances, and of the way in which all types of instrumentation can be best combined in a control system, are crucial in determining the level of control system effectiveness. These questions also give the measure, as well as the extent, to which on-site inspections must be employed.

He suggested that because of the importance of this scientific data that the conference spend several meetings either formal or informal discussing this data and also look at some implications this data has on the issues before the conference.[35]

Soviet Union rejects the new data. On July 20th at the 21st meeting of the Subcommittee, the Soviet representative denied the necessity to conduct scientific research for reaching an accord on a nuclear test ban. He contended that the new scientific data was not "germane" to the present negotiations and that "if there really is anything new in these data, this new material tends to support our position and not yours."[36]

Western reply to Soviet rejection. At the 22nd Subcommittee meeting, the United States representative denied

the preliminary findings of twelve years, the various research programs carried out by the United States. The United States representative commenting on this (military) may apply at the results of the program then.

The problems involved in this request of industry are the central ones in the implications of a common parachute test bed. The problems both of the respective capabilities of diverse and relatively inexperienced in terms and linearly relevant aerodynamics, and of the way in which all types of interrelationships can be best realized in a combined system, are central to maximizing the level of control system effectiveness. These questions also give the academy, in well as the science, to which co-axial interactions must be employed.

We suggested that between of the [illegible] variability data with the [illegible] general [illegible] either formal or informal [illegible] and also look at some implications this [illegible] before the conference.[1]

Doing [illegible]. In only one of the five meetings of the [illegible], the Soviet [illegible] delegation denied the necessary to [illegible] for reading on [illegible] in a [illegible] [illegible]. [illegible] that the new activities data and [illegible] [illegible] increased [illegible] and that the [illegible] reality is [illegible] are in these cases, with the [illegible] [illegible] [illegible] [illegible] and [illegible].[2]

[illegible] [illegible] [illegible] [

the Soviet charge that the new data would support the Soviet case and not the Western. He argued that

> these findings do not demonstrate the possibility of doing away with either international control posts located on various parties territory or the necessity for a certain appropriate number of on-site inspections to determine the precise nature of unidentified events.[37]

Debate About Testing During the Negotiations

Soviet Union resumes testing. When the Soviet Union announced on July 21st that they intended to conduct another series of atmospheric tests, this started extensive debate on the subject in the Conference.

United States comments. At the 604 meeting of the Conference on July 24th, the United States representative remarked,

> After the Soviet Union last year abandoned the moratorium and conducted a series of more than forty tests, I suppose that it felt that it had a right to test last. Be that as it may, members here will remember that, even after that series of more than forty tests, the United Kingdom and the United States made proposals for the stoppage of testing at that point and forever--the principal price for which, in terms of assurance, was that international inspection be permitted to look at less than one part in two one-thousands of Soviet territory in any given year. That was after that series of tests and before the recent United States series of tests, but even that farthing was not paid to bring this testing to and end.

He concluded by saying,

> there is suspicion that even a tiny bit of international inspection involves espionage affecting the security of the Soviet Union. But, surely, we can find some way not to have to deal with this problem of good faith; arrangements which make it

> irrelevant; arrangements which provide assurance; arrangements upon which confidence can be built in the light of experience, as we move forward.[38]

Soviet defense of position. At the 22nd Subcommittee meeting on July 26th, the Soviet representative denied that the Soviet Union had broken the moratorium. He referred to President Eisenhower's statement of December 29, 1959, when he said that the United States was no longer bound by the moratorium and to France's "systematically" carrying out bomb tests in the Sahara.[39]

United States reply. The United States representative, in exercising his right of reply, simply said that President Eisenhower did not say that the United States would test and "indeed it did not do so," further he added that Premier Khrushchev on January 14, 1960, had said that the Soviet Union would not renew tests if the West did not resume testing. In reference to the last to test argument, he said, that the Soviet Union was the last to test before the moratorium went into effect in November 1958.[40]

Interpretation of the Eight-Nation Memorandum

Western interpretation continued. At the 21st Subcommittee meeting on July 20th, the United States representative reviewed the major principles of the Eight-Nation Memorandum. He pointed out that the memorandum stipulated that the system might be based and built upon existing networks of observation posts, supplemented if

necessary by new posts by agreement. He continued, therefore,

> if agreement on a control system had to be reached by the parties to a treaty which by definition, would be an international agreement, the system as a whole would be international in character. [In conclusion he contended,] the obligation to accept on-site inspections by the representatives of the commission is in reality part and parcel of the obligation to furnish the commission with the facts necessary to establish the nature of any suspicious and significant event.[41]

Soviet comments on Western interpretation. The Soviet representative stated that it was the United States representative's interpretation alone which accorded the system of control posts an international character and that this was not inherent in the memorandum. He argued that the memorandum called for a national network and not an international network.[42]

Controversy continues. At the 22nd meeting of the Subcommittee on July 26th, the debate over interpretation of the Eight-Nation Memorandum continued. The United States representative continued to maintain his position that the memorandum "explicitly" called for a system of international control posts and obligatory on-site inspections. He pointed out that the United States accepted the memorandum as "one basis" for further negotiations and that proposals such as the Mexican and Brazilian proposals, should be welcomed.[43]

The Soviet representative replied that the West

necessary to our power by agreement. He continued, [illegible]

> If agreement on a central system can be obtained by the states in a treaty, that by definition would be an international agreement, the system is a basic world co-operational in character. The conclusion of agreement, the obligation to accept restrictions specified by the agreement of the countries is necessarily part and parcel of the obligation to give up the territorial rule, the force necessary to establish the basis of any effectual and enforceable event.[1]

Swift concurs in Senior Interpretation. The Senior Supervisorship stated that it was the Senior Lieutenant's interpretation since only Senior Supervised the system of Senior parts on instructional observer and that this was all listened in the conversation. He stated that the Senior Lieutenant called for a minimal contact and not an International contact.[2]

Instructor Interpretation. At the final meeting of the Subcommittee on Civil Life, the Senior Lieutenant of the Civil-Social Environment Committee. The Senior Senior Supervisorship Committee to relinquish the position that the Senior Senior "Civil for a system of International control power and obligation, Senior Supervisor. He stated that the Senior Senior Supervised the Senior Senior "the Senior Senior Supervisor and the purposes that of the Senior and Senior Senior Senior Senior Senior Senior.[3]

The Senior Supervisorship stated that the Senior

was reading into the memorandum an interpretation of its own. He continued to argue that the memorandum was explicit in its description of control posts as being nationally manned and that inspection was not obligatory. He did admit, however, that there were some missing parts in the memorandum that were subject to interpretation, but the basic parts were being given a different interpretation by the West.[44]

The Mexican and Brazilian Proposals Brought to the Forefront

The Mexican proposal suggesting a cut-off date for nuclear testing and the Brazilian proposal for a limited test ban for tests in the atmosphere and outer space were given wide discussion and were generally favored by the non-aligned nations as a solution to the present deadlock if agreement could not be reached on the basis of the Eight-Nation Memorandum.

Controversy over Mexican proposal. The matter of interpretation of the Mexican proposal for a cut off also became the center of controversy between the Soviet Union and the West. At the 60th meeting of the Conference, the representative from the United Kingdom, commenting on the Mexican proposal said,

> a treaty should be signed and a date to be written into the treaty on which the ban would be fixed by agreement for a time sufficiently later to allow

any country to make such last tests as it felt it required to make for national security.[45]

At the 21st meeting of the Subcommittee, he also said that consideration be given to the Mexican proposal whereby the Nuclear Powers could fix a date, merely as an illustration, terminating nuclear tests and that such a date might be written into the test ban treaty.[46]

The Soviet representative replied that the Western Powers were interpreting the proposal on their own conditions. According to him, the Mexican proposal suggested the setting of a date to terminate nuclear testing "whether an agreement has been reached by that time or not." The Soviet Union he said was willing to discuss the proposal but without conditions or provisos submitted by the West.[47]

The United Kingdom representative argued that the West was not attaching conditions and provisos to the Mexican proposal. He continued to maintain that the inclusion of a terminal date for testing in a test-ban treaty was explicit in the proposal.[48]

At the 61st meeting of the Conference, the Brazilian representative spoke in favor of the Mexican proposal but added that "it might have the undesirable effect of stimulating experiments during the rest of the current year."[49]

At the 63rd meeting of the Conference, the Mexican representative again urged the Nuclear Powers to take up his proposal and further suggested the possibility of

limiting the ban to atmospheric testing until an accord was reached on detection, identification, and controls concerning testing in other environments.[50]

At the 64th meeting, the Swedish representative suggested that the following measures might be dealt with immediately: first, the adoption of the Brazilian proposal outlawing at least atmospheric and outer space testing; second, coupling of the Brazilian and Mexican proposals; third, the initiation of practical steps leading to a ban on underground tests as well, consisting of an inventory of existing geo-physical observation posts, specific plans for equipping some stations with modern instruments, invitation to institutes to accept as a more definitive obligation the duty to register internationally all data observed, a study of a rapid communications system, blueprints for additional stations and plans for creation of an international commission.[51]

New Proposals Submitted by the West

At the 23rd Subcommittee meeting on August 9th, the United States representative delivered a statement on the new proposals that the United States and the United Kingdom were introducing based on the results of the United States Project Vela.

He initially remarked that a number of technical conclusions which bear on the efforts of the United States

limiting the ban to abnormalcies barring until as recent was reduced to cataclysm, labourlessness, and centrifugal wonderment reading in about nuclearness.[27]

At the 21st meeting, the Soviet representative suggested that the following measures might be taken with immediately: first, the adoption of the Soviet proposal relating at least abnormalcies and cancer cause tangible evidence; supplying of the Soviet and Soviet proposal; third, the initiation of practical steps leading to a ban on abnormalcies tests as well, remembering of the necessary or relative nonphysical observation posts, specific plans for establishing some stations also modern instruments, including in particular in keeping as a more detailed multiplying the ability to provide information all data observed, a study of a radio communication system, discussion for additional stations for plans for creation of an international commission.[28]

How Frequently Identified Or Lies Been

At the 22nd meeting, Soviet on August 29, the United States representative delivered a statement on the new proposals. Then the United States and the United Kingdom were introducing based on the results of the United States trial-and cause.

The initially remarked that a number of technical considerations which bear on the attempt of the United States

to respond to the eight-nation initiative and to achieve a workable comprehensive test ban treaty have been brought about by an extensive evaluation of the suggestions offered by the eight nations and by the review of the findings of research programs on the detection and identification of underground seismic events. Two conclusions in particular offer real promise, he said: first, is a reassessment on the basis of increased experience, of seismic detection capability, which indicates a substantially better capability for long-range seismic detection than has been the case in the past; the second, is that the estimate of the number of earthquakes comparable to an underground nuclear test of a given magnitude has been substantially reduced from the previous estimate.

He indicated that these developments were significant for the following reasons:

> First, the increase in long-range detection capability makes it possible to develop a worldwide network of control posts with substantially fewer detection stations in the Soviet Union, the United Kingdom, the United States, and other countries than those proposed in the April 18, 1961 United States-United Kingdom treaty draft.
>
> Secondly, the decrease in the number of unidentified events with which a detection system will have to cope will make it possible to decrease the number of on-site inspections required for verification.
>
> Thirdly, these developments do not provide a definite way of determining from seismic data in all cases that a particular seismic event has not been an underground explosion and, therefore, these developments do not eliminate the certain requirement of effective, reliable and objective on-site

> inspections as an essential element of any system of verification.

He continued that on the basis of these developments, the United States is prepared to discuss a comprehensive test ban treaty based on "a world wide network of supervised national monitoring posts." This, he added, would also involve a reduction in the number of on-site inspections previously required by the United States.

The keystone to an agreement, he maintained, is the obligation to facilitate the on-site inspection called for under the treaty. This, he continued, is so

> because many seismic signals can be identified as coming from earthquakes, but no seismic signal can as yet be positively identified as coming from nuclear explosions. Therefore, the only way to clear up the doubt as to the origin of an unidentified event is by on-site geographical inspection of the site from which the signal originated.

Technical developments, he continued, have not changed that conclusion. He added,

> indeed, to the extent that greater reliance is placed on seismic data from distant stations the need for on-site inspection intensifies rather than diminishes. Therefore, on-site inspection goes to the very heart of the issue of verification of a comprehensive nuclear test ban.

To put the issue straight on the United States position in relation to the principle of on-site inspection, he spelled it out as follows:

> 1. There should be prompt certification by an appropriate official responsible to an international commission that a seismic event reported by a network of internationally supervised national stations

has been geographically located according to the agreed scientific criteria and has not been eliminated from consideration pursuant to agreed criteria.

(a) The United States position is that these criteria should be on a scientific basis, as stated previously. These criteria will, of course, be concerned with the location of a seismic event, including the approximate time and position of the event, and with events which can be eliminated as ineligible for inspection.

(b) The United States position on the area to be covered once an inspection has been certified may need to be broadened somewhat from that previously stated because of changed capability on geographical location of a network of fewer internationally supervised national stations.

2. Upon certification by the appropriate international official of events within the territory under the jurisdiction or control of the United States or the United Kingdom the agreed number of on-site inspections are to be carried out at the request of the Soviet Union. If such events are on the territory under the jurisdiction of the Soviet Union the agreed number of on-site inspections are to be carried out at the request of the United States or the United Kingdom. If such events are on territory under the jurisdiction or control of other parties the selection of events to be inspected is to be by agreed procedures.

3. Any party having jurisdiction or control of territory in which an on-site inspection is requested is obligated to facilitate the prompt on-site inspection of the area. The on-site inspections shall be carried out by teams organized by the international commission. These teams shall be organized on an objective basis which ensures adequate representation of scientific and technical skills, and on a basis which adheres to the principle that self inspection by nationals of the State inspected or of its allies must not be permitted.

In regards to Soviet resistance to inspection, he said, it appears to be motivated by two concerns. First, is that the Soviet Union will not tolerate inspection because inspectors may learn something of military value.

To alleviate this concern, he said the United States is "openminded" and quite reasonable about such matters as the means by which an inspection team would be transported from the border of the State to the site of the unidentified event. He called on the Soviet Union to put forward any proposal in this regard that she may have, and it will find the West "very reasonable indeed." The second concern the Soviet Union appears to have, he said, is that talking in terms of a "right" of on-site inspection by an international commission, this implies "somehow of a derogation of the sovereignty of the State on whose territory the inspection is demanded." He said that, if this is the problem, then the United States is prepared to consider the question in a different manner. That is,

> it would be acceptable to the United States if, instead of stating a provision for on-site inspection as a right of the party requesting an inspection, the on-site inspection requirements were to be stated as an obligation to be fulfilled by the party on whose territory an unidentified seismic event occurred.

On the question of the number of on-site inspections, the United States representative outlined the present United States position. Up to this point, he said, the United States position on the number of on-site inspections has been for a sliding scale between twelve and twenty. However, he added that if the obligation to facilitate on-site inspections is accepted, the United States is prepared to consider a reduction from this

figure based on the new scientific information. This number, he continued,

> must take into account the detection, location, and identification capabilities of a network of internationally supervised national stations and the need to establish reasonable confidence on any side that no violation of the treaty will in fact occur.

The United States, he contended,

> does not seek on-site inspections because it wants international inspectors of the commission moving on Soviet soil but rather, and only, because scientifically on-site inspections are an essential part of a truly verifiable nuclear test ban treaty.

He then proceeded to outline the network of internationally supervised national stations as envisaged by the United States. This new position of the West would differ in two ways from the previous Western position, he pointed out. First, it would involve a substantially smaller number of stations; and second, it would involve a network of international supervised nationally manned stations instead of a network of internationally operated stations. For this system to be effective, he said, it would require that the international commission be able to process systematically and regularly the scientific data received from all stations, including those from within a particular country. Therefore, he continued, the international commission must have: rapid and reliable communications; be assured that all posts are operated strictly and continuously in accordance with strict scientific standards; it must be assured that each station is being

operated at peak efficiency and data is being reported continuously and accurately without jamming or interference; personnel of the control stations must meet agreed standards; instrumentation of the control stations must be constructed, equipped and calibrated in accordance with agreed standards; the commission must be made promptly aware of any suspicious event; and each control station must be located at a quiet site in a region scientifically satisfactory to the commission.

In conclusion, he argued that "nationally manned control posts must be under effective and adequate supervision at all times. The objective is to have international supervision of a nature which provides effective international control, giving all parties to the treaty confidence that the nationally manned stations are continuously operating in the efficient and scientific manner required."

Summing up the present new United States position, he said it consists of: first, acceptance of the obligatory nature of on-site inspections; second, a willingness, once the proposal referred to first is accepted, to consider a reduction in the number of on-site inspections based upon a scientific evaluation and the need to provide all parties to a treaty with reasonable confidence that no violation of its provisions will occur; third, a willingness,

once the proposal referred to first is accepted, to consider a network of detection stations which: would involve a substantially smaller number of stations world-wide than the number previously proposed, including a substantially smaller number of stations in the Soviet Union; would involve internationally supervised, nationally manned stations instead of a network of internationally operated stations.[52]

Soviet comments on the new proposals in the Sub-Committee. The Soviet representative commented in the Subcommittee following the submission of the new Western proposals, that this new position on control posts and on-site inspection has not changed the position on the principle of the basic conditions on which agreement could be achieved. He continued that "it must also be emphasized in this connexion that the United States, while giving wide publicity to its new position, is in fact defending its old position, slightly dolled up for purposes of disguise." In addition, he added, the United States is only paying "lip service" to the Eight-Nation Memorandum and has not accepted the compromise proposals put forward by this memorandum. He continued that there is a cardinal difference between the invitational inspection concept put forward in the memorandum and the condition of acceptance of obligatory on-site inspection as the key to further

Since the proposal referred to first is designed, in consultation a network of detection stations which would deploy a sophisticated jamming system of stations and thus the weather predictions proposed, including a sophisticated weather center of stations in the Arctic Ocean, would involve Electronic Countermeasures, nationally manned stations located on a network of internationally operated stations.[1]

[illegible]

Conclusion. The foregoing considerations concerned in the [illegible] activities the consideration of the new weather proposals, but this has relations on political points and activity analysis has not changed the position on the permanently of the usual considerations by which appropriate basis be achieved. Re-centralized [illegible] it must also be emphasized in this connection that the United States, while giving extra publicity to its new positions, is in fact defending the old position, identify which is the [illegible] or disputes.- In addition, in order, the United States is only giving "lip service" to the disarmament [illegible] and has not accepted the reasonable proposals put forward by this [illegible]. It indicated this there is a [illegible] difference between the institutional [illegible] [illegible] in the [illegible] and [illegible] of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

negotiations under the United States proposals. He expounded his previous arguments that the new United States position is not scientifically and technically based; and, in the light of the new scientific data put forward by the United States, it has no grounds for adhering to its former position.[53]

Test Ban Issues is Aired by the Conference

With the Subcommittee still deadlocked, the discussion of the test ban issue shifted to the plenary sessions.

United States reviews the issue. At the 69th meeting of the Conference, the United States representative reviewed the course of the test ban negotiations. He blamed the present deadlock on the obstructionism of the Soviet Union in refusing to budge from its interpretation of the Eight-Nation Memorandum and its refusal to discuss scientific matters which would facilitate steps leading to agreement.

As to the new United States proposals, he said, they were based on scientific and political realities and were consistent with the Eight-Nation Memorandum. As to on-site inspections, he continued, they will be necessary because even

> a superior, well-operated system of detection stations . . . will not be able to identify all events detected by it.

suggestions made by Italian Prime Minister, Dr. Gasperi, concerning the possibilities of the United States providing Italy with military assistance in the defense of the Mediterranean area, and Bonnefoy Sibour, said in the light of the new situation that Italy should be invited to the United Nations, in order to discuss the Libyan question on its own merits.[21]

That the Tripoli is going to the Mediterranean

With the Mediterranean well dominated, the discussion also of the Italy has been active in the military measures.

United States Central Mediterranean. At the 6th meeting of the Conference, the United States representative was viewed the crisis in the Iran and Mediterranean. The United the greater emphasis of the Mediterranean of the Italy union is related in Italy Tripoli the Mediterranean of the Italy United States Mediterranean and its related to Libyan military matters which most [illegible] Italian leaders of opposition.

As to the new Italian Libyan agreement, he said, they were based on economic and political matters and were consistent with the Italian-Italian Mediterranean. As to economic Italian, it continued, they will be Mediterranean Europe area

a [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]

He contended that the Soviet interpretation of the Eight-Nation Memorandum on the subject of on-site inspection means that it is an "option to be honoured only if, at the time, the Soviet Union so desires."[54]

Soviet representative comments on the issue. The Soviet representative commented that the United States new proposals contained "nothing hopeful or rational" and the United States position had remained unchanged. Further, he added, the proposals were an "ultimatum-like demand," whereby unless the Soviet Union accepted the obligatory on-site inspection principle, the United States was not prepared to examine other aspects of its own proposal.[55]

United Arab Republic submits a new suggestion. The representative of the United Arab Republic commenting on the deadlock in the Subcommittee requested the Nuclear Powers to iron out their basic differences which he believed stemmed from "political considerations rather than from the observance of practicality." He continued that the Eight-Nation Memorandum remained the "best, the most practical, and the fairest basis" for an agreement and he questioned the need for "discussions of the modalities" of a test ban. In conclusion, he suggested that the Nuclear Powers explore the possibility of seeking agreement on "practical criteria" governing situations requiring compulsory on-site inspection.[56]

[illegible] that the [illegible] interpretations of the [illegible] [illegible] on the subject of [illegible] [illegible] [illegible]

United States replies to Soviet statement. At the 70th meeting of the Conference, the United States representative denied the Soviet charge that the new United States proposals contained an ultimatum but instead they stressed the relationship between the acceptance of the principle of obligatory on-site inspection and the number of inspections and control posts. He continued that new scientific information had made it possible to reduce the number of on-site inspections and control posts but there would always be a certain number of unidentified events that could only be identified by on-site inspections. In conclusion, he said, "it would be rather a fruitless exercise to discuss the reduction in the number of inspections and control posts without acceptance of the principle of obligatory on-site inspection."[57]

United States comments on UAR suggestion. At the 71st meeting of the Conference, the United States representative commented on the representative of the United Arab Republic's suggestion that the Nuclear Powers establish criteria governing situations requiring on-site inspection. He said that the joint United States-United Kingdom scientific research program was just such an approach. The results of this program have been introduced for discussion and the new Western proposals are a direct result of the

program, but, he added, the Soviet Union has refused to discuss this data.[58]

Soviet Union critiques United States proposals and outlines the Soviet position on a test ban. At the 71st meeting also, the Soviet representative gave a formal reply to the United States statements on its position. He first said that a careful analysis of these statements revealed that they did not add anything constructive to the present debate. The Soviet analysis of the United States representative's statements was that he:

> touched upon various aspects of the problem of a nuclear test ban treaty; he spoke at some length on the history of our negotiations, on the scientific aspect of the matter, on the analogy between on-site inspection and control over general and complete disarmament, and so on, and he asserted that the main requisite for the conclusion of an agreement on a test ban must be the recognition of the principle of international on-site inspection.

The Soviet representative pointed out that the lack of positive results in the negotiations can be attributed to

> the Western Powers desire to make the solution of the problem of a nuclear test ban dependent upon an agreement by the Soviet Union to open its territory for a legalized intelligence system under the guise of international control and inspection.

He continued that the Soviet Union is just as much in favor of effective control over the compliance of a nuclear weapon test ban as anyone else. However, he added, "it does not believe it is necessary to have a form of international control which could be used as cover for

intelligence activities." Therefore, he argued, the Soviet Union after a thorough and many-sided study of the question has concluded that

> compliance with the obligations of an agreement on the cessation of nuclear weapon tests can, with sufficient guarantees, be successfully verified by the use of existing national means of detection of nuclear explosions. It was on the basis of this careful conclusion that the Soviet Union submitted its 28 November 1961 proposal for the cessation of all nuclear weapon tests in the atmosphere, outer space, under water or underground, using for purposes of control, systems of national detection of nuclear explosions.

This proposal, he continued, was based on a new approach to the question of cessation of nuclear weapon tests which would eliminate difficulties and obstacles which had prevented agreement before. This approach, he said, made it possible to solve the problem without "jeopardizing the security of States." He added, this approach was rejected by the Western Powers "because it would have disturbed the intelligence plans of the United States and its NATO allies."

This was the situation, he contended, when the Eight-Nation Memorandum was submitted by the non-aligned States in an attempt to break the impasse. He continued that the Soviet Union accepted this memorandum as a basis for agreement, in an attempt to bring about the reaching of agreement on the cessation of nuclear weapon tests. This proposal of the non-aligned was a compromise because, he said, it recognized that a system of continuous

[illegible] [illegible] [illegible] [

observation and effective control over the cessation of nuclear test can be based and built upon already existing national networks of observation posts and institutions. Further, he added, this memorandum proposed the establishment of an international commission composed of a limited number of highly qualified scientists to process the data received from national stations, thus adding an element of an "international nature" in the system.

As to the question of on-site inspection, he said the memorandum also puts forth a compromise proposal in that once a suspicious event is located by the commission, the country concerned will

> give speedy and full cooperation to facilitate the assessment, thus the State concerned would have the responsibility of clearing itself by all means at its disposal, refusal to invite on-site inspection if that is the only way to finally verify the event would be reported to the other parties concerned and to world opinion.

This, he contended, would be a very serious matter and "a decision that could not be taken lightly." Therefore, he argued, the formula of an on-site inspection upon invitation without bringing to it the concept of an obligatory on-site inspection does not preclude the possibility of on-site inspection in concrete cases."[59]

Indian representative expresses views on the issue. At the 72nd meeting on August 20th, the Indian representative expressed the belief that the possibility for reaching

an agreement on a test ban was not remote, the main difficulties, he said, centered around the respective claims regarding the capability of national stations in detecting all types of events and the nature of on-site inspection. He pointed out, in this regard, that the United States position was that not all events were detectable, while the Soviet representative had said that national stations had detected practically all nuclear tests. To the Indian representative,these statements showed that there was not too wide a divergence of views on the question.

As to the problem of on-site inspections, he said, that the Eight-Nation Memorandum contained "built-in obligations" which would provide adequate assurance that the ban would not be violated. He pictured the international commission as a scientific body which would generate the spirit of mutual obligation and international duty, to which States would respond automatically if it called for a decision of requiring on-site inspection.

As to the deterrent effect idea as put forth by the United States, he felt that the memorandum contained such a scheme in that the international commission itself could call for inspection if a suspicious event occurred. He added that the Soviet statements indicated that they would comply with such a request.

He, therefore, concluded that there was little

substantive difference on the issues separating the Nuclear Powers from reaching agreement.[60]

United States and United Kingdom Introduce Alternative Draft Treaties

Comprehensive test ban treaty. At the 75th meeting of the Conference on August 27th, the United States representative tabled a comprehensive test ban treaty based on the new Western proposals put forth by the United States and the United Kingdom. On introducing the new comprehensive draft treaty, he said that it was based on the scientific research program carried out by the United States and also takes into account the constructive suggestions of the Eight-Nation Memorandum. He summarized the treaty as follows:

> This treaty provides for the cessation of all nuclear tests in all environments. The parties to the treaty would undertake to prevent and prohibit the carrying out of such tests at any place under their jurisdiction. Further, the parties to the treaty would refrain from causing, encouraging or in any way participating in the carrying out of any tests anywhere at any time.
>
> These obligations would be supervised by an international scientific commission assisted by an international staff and a verification system. Each party would also undertake to cooperate with that commission in carrying out all measures of detection, location, identification and inspection, and in establishing elements of the system. The commission would have general responsibility for the collection of data on, and the reporting of, all events which could be suspected of being nuclear weapon test explosions and for making positive identification of the nature and origin of such events as necessary.
>
> The draft treaty provides that the commission should consist of fifteen members--four from the

West, four from the Soviet bloc and seven chosen from among parties jointly nominated by the United States, the United Kingdom and the Soviet Union. The United States, the United Kingdom and the Soviet Union would hold permanent membership on the commission.

The international staff would assist the commission by carrying out functions at the headquarters and by manning any international stations which might be set up by the commission in agreement with the parties concerned where that was considered desirable and was mutually acceptable. The staff would also participate in the international supervision, inspection and monitoring of the nationally manned detection stations.

The executive officer of the commission would be responsible for the staff under the direction of the commission. He would select the scientific and technical personnel for the international staff under criteria set forth in the treaty. The verification system would include nationally manned, internationally supervised and monitored detection stations to be constructed at sites which would be agreed upon by the parties to the treaty. The commission would establish the specifications and pay for maintaining, constructing, equipping and training of personnel for these nationally manned stations.

In addition, in so far as appropriate, use would be made of a number of national stations already in existence. The parties would assume an obligation to ensure that the system would begin operation at least six months after the entry into force of the treaty. Obligatory on-site inspection of unidentified events would be provided on the basis of carefully defined procedures laid down in the treaty. The executive officer, on behalf of the commission, would indicate which events had been located and remained unidentified after the application of criteria specified in the treaty.

The size of the area in any party's territory which might be inspected in connexion with any unidentified event would also be designated in the treaty. Inspection would take place under an annual quota arrangement for each country--an agreed maximum per year--but only if the events met the treaty requirements for eligibility for on-site inspection . . . .

The objective of on-site inspections would be carried out by teams organized by the commission so as to prevent nationals from any State inspecting events on its own territory. States would assume

> an obligation to facilitate and to cooperate in any on-site inspection undertaken under the treaty.
>
> A party would have the right to withdraw from the treaty if it determined that the treaty had been violated, or the obligation to facilitate an on-site inspection had not been fulfilled, or a nuclear explosion was conducted by a State not a party to the treaty and such an explosion jeopardized the withdrawing States security, or an explosion occurred and it was not possible to identify the State conducting the explosion but such explosion might jeopardize the withdrawing party's national security, the withdrawing party would request that a Conference be called to include all other parties. Withdrawal would not take effect until the passing of a specified time.
>
> The treaty would come into force on a specified date which would be subject to negotiation, thus incorporating the recommendation made by the Mexican representative on 9 May 1962.

The United States representative indicated that the keynote of the comprehensive treaty was the provision for obligatory on-site inspection which provides that all States have an "unconditionally, unequivocal and an Honest Injun obligation to facilitate such an on-site inspection."

<u>Partial test ban draft treaty proposal</u>. The United States representative continued his statement that "the United States in this search for agreement is not content to leave any area unexplored or any worthwhile idea unproposed." He then went on to say,

> the United States while continuing to negotiate urgently and in any appropriate forum for a comprehensive treaty, in the interests of all humanity, would nevertheless be prepared in an effort to reach the widest possible area of agreement, in the soonest possible time, to agree to a treaty banning nuclear weapon tests in the atmosphere, in outer space and underwater.

In proposing this partial treaty, he said that there are three reasons why such a treaty would be in the interests or a positive gain for society. First, it would result in a downward turn in the arms race; second, it would have an effect on all countries about to enter the nuclear arms race and make more difficult the proliferation of nuclear weapons; third, it would stop the radioactive pollution of the atmosphere, space and the oceans.

He then stated that briefly this treaty would:

> ban nuclear weapon tests in or above the atmosphere and in territorial waters or high seas;
> bind the signatories to refrain from encouraging or participating in such nuclear explosions by any other State;
> permit explosions prescribed in the treaty for peaceful purposes under conditions specified in the treaty;
> not require any international verification machinery;
> provide a cut-off date for testing; and,
> contain provision for withdrawal, after notice had been given, if a party deemed the treaty had been violated or that a State not a party to the treaty had tested and if the party also deemed this jeopardized its national security.

He continued that in the past a partial test ban treaty has been tied to a moratorium on underground testing. This proposal, he argued, runs contrary to the reason the United States will consider a partial test ban treaty, that is to get agreement now on those portions which are agreeable while negotiations continue on a comprehensive test ban treaty. He added that to make a partial test ban treaty contingent upon a moratorium would only revive the

issues that should be left for solution as part of a comprehensive test ban treaty.

In concluding his statements on the two draft treaties, he pointed out that neither treaty prohibited the conducting of laboratory tests nor preparatory work for testing, and he added that the United States plans to remain in readiness.[51]

Soviet Union Rejects the Western Draft Treaties

The initial Soviet reply to the submission of the two alternative draft treaties was expressed by the Soviet representative that "on the basis of our first impressions, these documents repeat already well known United States proposals on the question of the cessation of nuclear weapon tests." He continued that the comprehensive draft treaty, "leads one to think that it rejects completely the proposals of the neutral States." He added, "the Soviet position in relation to obligatory on-site inspections is very clear and the embodiment of this condition in the new draft treaty makes it unacceptable as a basis for agreement."

As to the partial test ban treaty, he said that it is designed to preserve the possibility of underground testing, "in other words on legalizing the nuclear weapon." He added that making underground tests permissible would

act as a stimulant to the nuclear arms race. Therefore, he said, we must talk about the cessation of all nuclear weapon tests.

He concluded his remarks by saying,

> I repeat that the Soviet Union is in favour of an early cessation of all nuclear weapon tests. If that is also the desire of the United States and the United Kingdom, why should we not accept the proposal of the eight neutral States as a basis and try to work out quickly--and that can be done--an agreement on the banning of all nuclear tests in the atmosphere, in outer space, under water and underground.[62]

At the 76th meeting, the Soviet representative continued his analysis of the two alternative draft treaties proposed by the United States and the United Kingdom. He repeated that the new draft treaties do not reveal any change in substance from the position held by the Western Powers over the years of negotiations, that is "it still requires on-site inspection not for control or verification but for intelligence purposes." He added that the new draft treaty was not a new position but a "new dress on the old girl." He argued that a comparison of the draft treaty submitted by the Western Powers on 18 April 1962 and the latest draft treaty reveals that the Western Powers have not accepted the Eight-Nation Memorandum compromise proposals because an integral part of both treaties is obligatory on-site inspections. Consequently, he added, they have not moved toward the Eight-Nation Memorandum

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which puts forth the principle of inspection by invitation. He continued and pointed out that the last draft treaty submitted by the Western Powers was built on the premise of international control posts on the territories of States parties to the agreement and the new draft treaty in substance describes an international system of centralized observation stations with international supervisors appointed by the international commission. The Eight-Nation Memorandum he said calls for national stations for the detection of nuclear explosions. Both treaties, he continued, place the emphasis on the appointment of one person to have full authority over the international control system while the memorandum on the other hand suggests an international commission of a limited number of highly qualified scientists which would be the main link in the chain of the system. Therefore, he concluded that the Western draft treaty incorporates very little of the memorandum.

In regard to the partial test ban treaty, he said the United States representative in his statement in regard to the partial test ban treaty downgraded the importance of underground testing while on previous statements he had spelled out the military significance of such tests. He further argued that contrary to the argument of the United States a partial ban on tests would not stop

the proliferation of nuclear weapons. He agreed with the United States representative that the partial treaty would stop the radioactive pollution of the atmosphere, space and oceans. However, he added, there was a much greater danger, "that was thermo-nuclear destruction if the arms race is allowed to continue." He also rejected the partial treaty on the grounds that this would give the United States a military advantage because they had used this means of testing to perfect its improvements and modernization of the nuclear weapon. Therefore, he pointed out that if the underground tests were legalized, this would give the United States the means to continue her military development while the Soviet Union would have its hands tied.

In conclusion he said:

> We propose to the Western Powers to come to an agreement to put an end to the testing of all nuclear weapons whatever may be the environment for such tests. The Soviet Union is ready to approach this question as a constructive matter, taking into account all the useful thoughts and consideration which may have been advanced in the course of the debate by various delegations.
>
> Basing ourselves on this, we are ready to note certain differences in the nature of the proposals with regard to the banning in the various environments, taking into account the distinction that has to be drawn between tests under water, tests in outer space and in the atmosphere, and tests underground. At the same time--and I would stress the importance of this point--simultaneously we would end all testing, but with respect to nuclear tests in outer space, in the atmosphere or under water such a decision would be final in its nature; whereas with respect to underground tests such an agreement would

be only on the basis of an understanding that it would remain in force until such time as it could be replaced by a permanent solution.

To find such a permanent solution to the problem of a cessation of underground nuclear tests we can use the very sound foundation of the memorandum of the eight neutral Powers.[63]

Non-Aligned Members Express Views

At the 76th meeting on August 29th, the Nigerian representative commenting on the United States and United Kingdom alternative draft treaties said that these treaties marked a significant advance by the West toward a test ban but that the chances for their acceptance were fair, particularly the partial test ban without inclusion of a moratorium on underground tests. He concluded that any agreement had to take into consideration the problem of underground tests; therefore, a partial test ban treaty must include a moratorium on underground tests pending an agreement on a comprehensive test ban.[64]

The Brazilian representative at the 77th meeting suggested that rather than taking "painstaking efforts" to ascertain the true intentions of the Eight-Nation Memorandum, the conferees should negotiate on the partial test ban treaty proposal because it had not been discarded entirely by any delegation.[65]

The Swedish representative said that the Eight-Nation Memorandum is the "only possible bridge for compromise" and asked the Nuclear Powers to give it more

consideration. He continued that the West and the Soviet Union appeared to be in agreement on the use of national observation posts and the need for an international commission and their differences regarding procedures for on-site inspection appear to be negotiable. In concluding, he proposed that the establishment, at least on an interim basis, the international scientific commission as proposed in the memorandum. The first task, he said, for the commission should be to examine the problems pertaining to the organization of a control system.[66]

The Burmese representative proposed at the 78th session that because little reliance could be placed on an unconditional moratorium that the heads of the Nuclear Powers should:

> (1) assume personal responsibility for ensuring that no underground tests are conducted . . . until a comprehensive treaty comes into force,
> (2) pledge themselves anew to work for . . . a comprehensive treaty,
> (3) agree, following the Swedish proposal, that the international scientific commission envisaged in the Eight-Nation Memorandum be established . . . .
> (4) and that their delegations will cooperate fully with this commission in working out an agreement on the complete cessation of nuclear tests.[67]

At the 78th meeting, the Nigerian representative clarified his previous views on a moratorium by saying that he had merely requested that the Nuclear Powers consider the question of a moratorium on underground tests and that he by no means advanced an "unpoliced and unmonitored moratorium."[68]

The Ethiopian representative suggested that in the event agreement was not reached on a nuclear weapon test ban consideration should be given to a "pledge" by the Nuclear Powers not to test after the end of the year.[69]

The Mexican representative aired his views at the 80th meeting, and he said the Conference had three ways leading to a cessation of tests: first, conclusion of a treaty with the necessary guarantees prohibiting nuclear tests in all environments; second, agreement on the cessation of atmospheric, outer space and underwater testing without prejudice to continuing negotiations in regard to control over underground tests; and third, the recommendation of the time limit to end competitive nuclear tests.

He acknowledged that a treaty required reasonable guarantees, but there were no automatic guarantees which were 100 per cent dependable and that in the last analysis the best guarantee of fulfilling obligations was "national honour and good faith."

In conclusion he said that

> a study of our debate makes it difficult to avoid the following conclusions:
>
> (a) arguments produced by either party to explain or justify their respective attitudes might be valid from their respective points of view, but from the point of view of the higher interests of humanity those arguments are unacceptable and they should be set aside, because nobody can justify an indefinite continuation of nuclear weapon tests;
>
> (b) the armaments race does not increase but reduces national security and collective security;

(c) nuclear weapon tests have neither moral nor juridical justification; and I call attention particularly to this last point--

(d) the parties have already accepted one of the obligations mentioned in the memorandum of the eight non-aligned States. Which? The obligation to collaborate with the international scientific commission submitting to it those elements, data and facilities required by it for the identification of doubtful phenomena.[70]

At the 81st meeting, the representative of the United Arab Republic suggested the need to agree on the modalities of a control system and urged consideration of the recent Swedish proposal on the interim establishment of the international commission. In regards to the partial test ban treaty, he said that there is almost agreement and that each party concerned should "give a little here and a little there, in order to reach agreement."[71]

United States Replies to Soviet Charges About the Draft Treaties

At the final Subcommittee meeting during this period, the United States replied to the Soviet charges in reference to the two alternative draft treaties. He refuted the Soviet argument that the comprehensive draft treaty was not any different than the 18 April 1961 Western draft treaty proposal. He said that there were areas where significant change had taken place and outlined them as: first, the new treaty proposal relies on nationally manned stations as proposed by the Eight-Nation Memorandum; second, the status of the international commission has

been significantly altered, it has been expanded to include more non-aligned States, the staff has been greatly reduced, the executive officer would be more directly related to the commission and could be replaced by the commission; third, the question of obligatory on-site inspection has been substantially altered, not in respect to the principle of on-site inspection but in the reduction in the number of quota for on-site inspection and the formulation of the inspection teams has been delegated to the executive officer with the restriction that no national inspect his own country.

The United States representative continued that the Soviet representative had made many comments on the new draft treaty proposal to show that there was no change in the Western position; however, he ignored the far reaching changes and concentrated on "some rather small differences, or on areas where the 18 April 1961 treaty and the 27 August 1962 comprehensive treaty are actually the same."

Many of the issues the Soviet representative referred to, he said, the United States has been repeatedly been requesting the Soviet Union to sit down and talk about these areas of differences; however, the Soviet Union has refused.

In regards to a moratorium, he repeated previous Western arguments that the United States would continue to

work towards a comprehensive agreement if a partial test ban treaty was accepted, but the United States would not accept the obligation to refrain from underground tests without adequate and effective controls.

In a further effort to solve the Soviet fears of "espionage" by the international commission, he proposed the possibility of having the commission empanel a highly qualified body of very eminent scientists who would be chosen solely on the basis of their high scientific knowledge, who would conduct the investigations for the commission. Further, he proposed the establishment of objective criteria and procedures for the commission in such a way that each party would be obligated to allow the commission to conduct inspections, and this procedure would obviate the necessity to leave the decision to invite the commission to the individual discretion of each party to the treaty at the time.[72]

United States Proposes Subcommittee Meetings During Recess

At the August 31st meeting, the United States representative introduced a statement by President Kennedy whereby he accepted the beginning of 1963 as "a reasonable date" for the termination of all nuclear testing. To accomplish this purpose, the statement added that negotiations be accelerated and that maximum effort be made to conclude an effective agreement by that date. However, in

relation to a moratorium, the statement said that

> gentlemen's agreements and moratoria do not provide the type of guarantees that are necessary. They do not give the assurance against an abrupt renewal of testing by unilateral action. This is the lesson of the Soviet Government's tragic decision to renew testing just a year ago. Nor can such informal arrangements give any assurance against secret underground testing. That is why we must have a definite agreement with reasonable and adequate assurance. The United States cannot be a party to any renewal of false hopes which the Soviet Government shattered last September . . . .[73]

In accordance with the President's statement, the United States representative proposed that the Subcommittee meet during the forthcoming recess proposed for the Conference in order to reach an agreement on a test ban by the beginning of the next year.[74]

At the 81st meeting, the Soviet representative agreed to the proposal but declared that negotiations had to be conducted on the basis of the Soviet November 20th proposal or the Eight-Nation Memorandum.[75]

However, after an exchange of views, it was decided that each delegation could resume negotiations in the Subcommittee on whatever it decided and the Subcommittee was scheduled to continue negotiations during the recess.

Summary

Following the 82nd meeting on September 7, 1962, the Conference was recessed until November 12, 1962. The recess was called to allow the delegations to take part in

the forthcoming Eighteenth General Assembly meeting of the United Nations.

This period of twenty-six plenary meetings and seven Subcommittee meetings did not see any appreciable change in the positions of the Nuclear Powers. The Soviet Union remained firm in its position and refused to negotiate on anything other than national detection systems for control of a comprehensive test ban with the acceptance of an international scientific commission as proposed by the Eight-Nation Memorandum but without defining their concept on how this body would operate. The Western position was clarified by the discussions of the new scientific data and the introduction of two draft alternative treaties. One for a comprehensive test ban with internationally supervised national detection systems, an international commission to monitor the system and the use of obligatory on-site inspection for unidentified events located by the system under a quota system--these were the provisions introduced in the two draft alternative treaties. The other proposal was for a partial treaty prohibiting testing in the atmosphere, outer space and underwater with reliance on national systems for control. The United States would not accept a moratorium on underground tests in conjunction with the partial treaty.

The Eight-Nation Memorandum submitted on 15 April

1962 remained the center of continued debate over interpretation. The proposal by the Mexican representative for a cut-off date to end all nuclear testing was accepted by both nuclear sides but with different interpretations.

The Subcommittee did agree to meet during the recess after the acceptance of the 1 January 1963 cut-off date on testing, but the debate over what should be discussed or not indicated that agreement would be difficult in the Subcommittee during the recess.

This period did see the acceptance of national detection systems for control by the West, but with international supervision; however, the Soviet Union refused to accept the principle of obligatory on-site inspection, the keystone of the Western proposals, although she did accept it by invitation. Thus, this period opened with the Conference deadlocked on the nuclear weapon test ban issue and it closed in the same status.

IV. THE THIRD PERIOD NOVEMBER 26, 1962 - DECEMBER 20, 1962

Introduction

This period commenced when the Conference reconvened on November 26, 1962, following a recess since September 7, 1962. Thirteen meetings of the Conference were held during this period.

The Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests actually remained in session during the Conference recess and held a total of twenty-seven meetings, nineteen during the recess.

Basically the period was spent in a search for some means to break the continued deadlock that had existed in the test ban negotiations since the Soviet Union introduced its treaty proposal on November 28, 1961, based on national detection systems for control over the detection of all nuclear explosions in all environments.

The Eight-Nation Memorandum of April 16, 1962, remained in the center of the controversy over interpretation. The introduction of a United Nations resolution which adopted the Mexican proposal for a cut-off date of January 1, 1963 for nuclear testing added another element to the dispute over interpretation or proposals.

The Soviet Union and the United States Review the Subcommittee Meetings held During the Recess

Western critique. At the 83rd plenary meeting on November 26th, the United States representative in his initial remarks about the Subcommittee meetings during the recess said, "unfortunately" no progress was made.

The Soviet Union, he said, during the Subcommittee meetings continued to reject the very minimum amount of international arrangements for detection, location and

inspection of seismic events that would give "reasonable and adequate assurance of compliance with a comprehensive nuclear test ban agreement." He continued that the Soviet delegate also refused to consider a partial test ban on testing in those elements which do not require international verification.

After this initial statement he added that there is cause for hope and gave three reasons why: first, there is a strong incentive to halt the arms race; second, just the fact that the Eighteen-Nation Committee exists and continues to provide a forum; third, recent events have had a sobering effect and they have also shown that the Nuclear Powers can reach agreement.

The United States representative concluded his statement by reviewing the status of the nuclear weapon test ban negotiations. First, he said, the recent General Assembly session of the United Nations gave a great deal of time and debate to the test ban issue and two resolutions were the outcome for guidance of this Conference. Second, he continued, the main obstacle to agreement remains the fundamental issue of underground tests, but he added, agreement is almost certain if the question of control and inspection is settled.[76]

Soviet critique. The Soviet representative in his opening statement to the Conference on November 26th remarked

in regards to a partial test ban agreement,

> half-measures in the question of the cessation of tests, that is such measures as would preserve the possibility of carrying out further nuclear weapon tests in any one environment, would provide no solution to the problem. [He continued,] all nuclear weapon tests, in the atmosphere, under water, underground or in outer space should be put an end to once and for all. Furthermore this problem must be solved now.

In relation to the meetings of the Subcommittee during the recess, he said that no progress was made because the Western Powers continued to hold to their old positions and, as a result, the talks remain in a deadlock. Further, he added that at the nineteen meetings of the Subcommittee during the recess,

> the Western powers stubbornly continued to put forward their demand for the establishment of an international control system and compulsory inspection knowing beforehand that it is impossible to reach agreement on such a basis.

In conclusion, he said that the Western position is that agreement should be limited to tests only in the atmosphere, outer space and underwater, and they "insist on retaining their freedom of action in regard to continuing nuclear tests underground." The Soviet Union, he continued, "being anxious that the cessation of nuclear weapon tests should be real and not illusory, cannot leave the question of underground tests open." To conclude such an agreement would result in continuing and extending the nuclear arms race and in involving other States in it.[77]

Sweden Reintroduces the Proposal for an Interim Commission

At the 84th meeting on November 28th, the Swedish representative repeated a previous statement of his when he said,

> would it not be worthwhile to consider now the establishment, at least on an interim basis, of the commission proposed in the Eight-Nation Memorandum, about which the Powers are in agreement, with, as a first task, the scientific examination of the question of how a control system should be organized?

He added that such a course would extend the area of agreement and thereby facilitate the reaching of a permanent test ban treaty.

He then proposed that the Nuclear Powers call in immediately a panel of scientists from different countries and to leave it to this panel to act for the time being as an interim commission. This panel would set up on a time-limited basis to study and help establish the necessary machinery for a test ban agreement, he pointed out. It would also, he continued, furnish the conference with scientific and technical information. And he proposed that a moratorium be in effect during the existence of this scientific panel.

The advantages to this approach, he remarked, were that valuable experience could be gained while negotiation continue and it will also make it easier and quicker to install a control system when agreement is reached.

Design Activities: The Proposal for an Activity Committee

At the 4th meeting on November 12th, the Committee tentatively reviewed a previous discussion of this plan in mind.

> Would it not be worthwhile to consider how the mechanisms, or lack of an infinite level, of the communication involved in the right-hand-side room action, about which the Powers are in agreement, which is a first task, the activity committee of the question of how a medical system should be organized.

He added that such a course would support the idea of decentralization and thereby facilitate the execution of a programme that Jim Grady.

The plan proposed that the initial Powers will be immediately co-opted at activities also daily work. Committees and be there if to this point be met for the main fabric in an infinite committees. This panel would run up to a time-limited basis by about and this method also necessary committees for a time but alternately, be pushed back. It would also, be constituted, provide the conference with alternative and-terminal information. And be involved that's a necessary to be affect during the purposes of this activities panel.

The accountant to this discussion, he indicated, was that reliable equipment would be needed this committee and in fact also, it really gives the opinion in larger a central giving some management to conference.

In concluding his statement, he said, "if we do not act very soon it might be too late because we do not know how long the favorable circumstances will last which now facilitate an agreement."[78]

Comments on the Swedish proposal. The United States representative, in commenting on the Swedish proposal, reaffirmed the United States position that the detection stations on various countries' territories and compulsory on-site inspection by the commission provide the most effective and objective method for both detecting and identifying seismic events. He further stated that the Swedish proposal appeared to suggest a moratorium to which the United States was opposed unless there was some means to give the commission the power to conduct on-site inspection to verify the moratorium.[79]

The United Kingdom representative also commented on the Swedish proposal when he said, "regardless of whatever body is set up we must have the fullest assurance that adequate detection exists and that the information derived therefrom is properly correlated."[80]

The Burmese representative endorsed the Swedish proposal and said, "the setting up of an impartial international scientific body was indispensable to a successful test ban treaty."[81]

At the 86th meeting of the Conference, the Soviet

In considering the statement, it asks, "If we do not act very soon it might be too late. Perhaps we do not know how long the favorable circumstances will last which have facilitated an agreement."[70]

Comments on the Soviet proposal. The United States representatives, in commenting on the Soviet proposal, rearranged the United States position that the determination rather on various nonverbal variations and nonpolitical possible inspection by the Soviets provide the most effective and adequate method for both determining and identifying seismic events. In further stated that the Soviet proposal appears to propose a moratorium to which the United States has proposed various steps that some doubt be given the commitment the Soviet to modify nonpolitical inspections in verifying the moratorium.[71]

The United States representative also commented on the Soviet proposal when he said, "Inspections of nuclear body is not up to such here the United States seems that adequate operation rather and then the inspection United States therefore is simply complicating."[72]

The Russian representative answered the United States proposal and said, "The meeting is not the important issue. National security body was [illegible] of a technical test ban treaty."[73]

In the same meeting at the conference, the Soviet

representative rejected the Swedish proposal because it would sidetrack the conference from its main task of reaching agreement on a comprehensive test ban.[82]

Western and Soviet Summary of the Progress of the Subcommittee

At the 86th meeting, the United States and the Soviet Union each made a more concise report on the progress of the Subcommittee.

Western review. The United States representative said that the Western Powers approached the Subcommittee meetings during the recess with the hope of finding a common ground with the Soviet Union in order to make some progress. The West, he explained, proposed a working arrangement to look at the operation and composition of the international commission, but the Soviet Union stated that this would have to wait until outstanding issues in principle had been agreed upon. He continued that when it was proposed to work out questions relating to the worldwide control post system, the Soviet Union said it was not necessary, because all the required posts already existed and there was no need for coordination and cooperation among the existing stations.

On the question of on-site inspection, the Soviet Union, he said, refused to provide information on what scientific basis they believed that existing systems of

detection were adequate to detect and identify all seismic events.

As for the Soviet position on how agreement could be reached, he remarked that they all boiled down to acceptance of the Soviet November 28, 1961 proposal. First, acceptance of the November 28th proposal for a comprehensive ban on all tests with the use of national systems for detection and identification; second, acceptance of their interpretation of the Eight-Nation Memorandum as being essentially the same as their November 28th proposal plus an international commission of unspecified powers; and third, acceptance of a ban on tests in the atmosphere, outer space and underwater and a moratorium on tests underground.

He continued that the basic issue has and still remains the problem of underground testing and its control. The West, he said, has proposed to set aside for now this issue and accept an agreement in the other environments or to settle it "on a strictly objective scientific basis." The Soviet Union he contended "purports to have the scientific basis but refuses to present any scientific evidence to support its claim" that national detection systems can control a treaty for banning nuclear tests in all environments.

He concluded by saying that the Western position is

still "crystal clear" about the subject of an uncontrolled moratorium, "we will not enter into such an uncontrolled, uninspected moratorium arrangement again."[83]

Soviet review. The Soviet representative in his initial remarks said that the position of each side had been narrowed considerably and are now not far apart. Consequently, he added, no great effort is needed to overcome the small distance separating the Nuclear Powers from reaching agreement.

In reference to the United Nations debate and resolutions, he said that three conclusions can be drawn: first, that all nuclear tests must be prohibited without exception; second, that it is difficult and almost impossible to reach agreement while testing is being continued; and third, there is solid and overwhelming support for the Eight-Nation Memorandum for a compromise solution to the problem of banning nuclear weapon tests.

As a compromise solution to the problems deadlocking the Subcommittee on the test ban issue proposed that the suggestion put forth by Soviet and Western scientists meeting in London that the use of automatic seismic stations which do not require the presence of foreign inspectors might be considered. He continued that the Soviet Union was prepared to accept this idea for the purpose of control.

He reaffirmed the Soviet contention that they could not accept compulsory inspection because of national security reasons and that existing and technical improvements make the demand for inspection superfluous.[84]

Western reply. The United Kingdom in replying to the Soviet statement remarked that the difference between the two sides had indeed been narrowed, but the narrowing, he said, had been done entirely by the West and "not one iota of it from the Soviet Union."

In relation to the use of automatic seismic stations he said that the conclusion of the experts was that they would be helpful in reducing the number of on-site inspections but not of eliminating them.[85]

At the 87th meeting of the Conference on December 5th, the United Kingdom and the United States representatives both made statements that basically attributed an inflexible Soviet position as the reason for continued deadlock. The United States delegate went further and stated that

> it appears that the Soviet Union in their actions and statements in the Conference and the Subcommittee is attempting to turn the United Nations resolution into an uncontrolled moratorium on underground tests. [He added that] the United States delegation believes that we may once again be greeted with a unilateral pledge on the part of the Soviet Union.[86]

Debate over Automatic Seismic Stations

United States views. At the 89th meeting of the

Conference on December 7th, the United States representative gave a formal reply to the Soviet proposal of using automatic seismic stations for control. He stated that a close review of the Soviet proposal revealed that the proposal as it now stands is that it is not to be considered as a part of an overall control system. The Soviet proposal, he continued, is that we agree in principle not only to accept some

> unclear, undefined system of automatic seismic stations to monitor underground tests, without regard to where they might be located and without regard to the equipment in those stations or how they would function but, also, that the Western Powers must accept the Soviet view that no on-site inspection would be necessary in any circumstances.

This the United States representative declared the West could not accept and on the present basis, the proposal is unacceptable.

He added, however, that the West was willing to study in a scientific, objective, and impartial manner any proposal which the Soviet Union would make on automatic seismic stations. Further, he stated, there is no evidence which indicates that a system of automatic stations could replace completely or substantially a manned network of control stations or could do away with obligatory on-site inspections.[87]

Soviet views. At the 90th meeting on December 12th, the Soviet Union proposed acceptance of the Soviet proposal

to consider automatic seismic stations. The Soviet Union, the Soviet representative said, would agree that these stations should be established in highly seismic areas in the Soviet Union and it was willing to allow foreign personnel to deliver and retrieve the equipment for the international center. Thus, he argued, the proposal would consist of "automatic seismic stations with certain elements of international control."[38]

Additional Western comments. The United States representative welcomed the Soviet statement as meaning that the Soviet Union was ready to negotiate further on the use of automatic seismic stations. He added that the West had not rejected the idea of "black boxes" but rejected the idea that they replace the need for manned control stations and on-site inspection.[39]

Summary of the Subcommittee Meetings During this Period

At the 94th meeting of the Conference on December 19th just prior to the recess of the Conference, the Nuclear Powers reviewed the progress of the Subcommittee and the outstanding issues on the nuclear weapon test ban problem.

Western review. The United States representative began his review of the test ban issue interpreting the Soviet proposal for the use of automatic seismic stations in the control system. The proposal, he argued, boiled down to Western acceptance of the automatic seismic

by consider automatic atomic charges. The United States, the United Kingdom, and Canada agree that these stations should be established in supply bases in the Arctic Ocean and in war-mining for other foreign personnel, to deliver and sustain the equipment for the laboratories. There, as stated, the proposed media should be technically atomic structures with portable weapons of laboratories carried.[4]

Additional Western Comments. The United States representative informed the Soviet delegation in meeting that the Soviet Union was fully in cooperation further on the use of automatic nuclear stations. In added comments that had not reflected the idea of "future issues" but consider the data that they explore the most due weapons control stations and nuclear laboratories.[5]

Summary of the Discussion Concerning the Ban on Nuclear Weapons

At the 5th meeting of the conference on December the June point in the issues of the conference, the United States carried the proposal of the Soviet and the outstanding issues on the nuclear weapons had been pressing.

Nuclear weapons. The Soviet Union representative began the review of the last two issues introducing the Soviet proposal for the use of nuclear weapons restrictions of the nuclear system. The proposal, in brief, being that in wartime consideration of the information without

stations but that there would be no coordination or supervision of nationally manned detection stations nor any obligatory on-site inspections.

The Western position was that a properly located and adequately built system of automatic stations might possibly be useful but there was no scientific facts or information that such a system could replace a manned station system nor would it eliminate the need for on-site inspections.

He commented further that a system of automatic seismic stations properly equipped and located might be helpful in checking on data provided by nationally manned, internationally coordinated stations. He added, however, that because of the difference in opinion on the capability of a proposed automatic seismic system, the West had proposed a meeting of qualified experts to make a scientific and technical study of the use of automatic seismic stations in a detection system. To support this Western proposal, he gave several reasons for such studies: first, it is necessary to know the technical capabilities of such a system to determine its proper scope in an overall detection and identification system; second, need to examine the equipment itself and properly analyze it under actual conditions to enable proper placement to receive maximum benefit from a system of automatic seismic stations; and

third, it provides another means to narrow the area of disagreement even further in the area of identification of underground tests.

To this Western proposal for a scientific study, the Soviet Union, he pointed out, has not responded but "continues to insist that we agree in principle first and then discuss the technical details."

In relation to the Soviet proposal to accept foreign personnel to deliver, place, and retrieve automatic seismic equipment under proper safeguards, he said,

> this is a step forward towards solving the problem of international coordination and supervision of a detection and identification. [He continued that,] although, their proposal was made in reference to the placement of automatic seismic stations it could just as easily be applied to on-site inspection groups and could eliminate the Soviet fear of espionage by foreign personnel.

As to the United Nations resolution calling for the end of all tests as of 1 January 1963, he said, the Soviet interpretation that this means whether agreement is reached or not and the acceptance of an uninspected, uncontrolled moratorium is unfounded and unacceptable. The United States, he said, interprets this resolution to mean the Conference should strive to reach by 1 January 1963 agreement on an adequate and effective treaty with an effective detection and identification system. To reach this goal, he pointed out that there were two roads available: first, by reaching agreement on a comprehensive

ban on all tests with adequate and effective control; or second, if the difficulties to reaching a comprehensive ban are too great then a partial ban against tests in the areas where they can be adequately controlled and where there is already agreement should be followed.

In summary, he said,

> the United States has done its level best to reach agreement with the Soviet Union on an effective treaty banning tests, but the United States is just not prepared to accept another sad experience with a unilateral uninspected arrangement on tests, nor is it prepared to accept an unworkable system of "black boxes" in its Christmas stocking.[90]

Soviet review. The Soviet representative in his remarks on the course of the meetings of the Subcommittee stated that the main issue preventing agreement remains the problem of inspection. He continued that the Soviet Union considers inspections as not necessary in order to reach agreement on banning all nuclear weapon tests.

In relation to the automatic seismic station proposal, he stated,

> what is to be put into the automatic stations we wish to solve in collaboration with the Western Powers, but these details can and should be agreed after we have reached agreement in principle with the United States on the use of the automatic stations as an adjunct to national detection systems without the demand for inspection.

As to technical studies, he said that the negotiations are now deadlocked and if a technical discussion was started without reaching a preliminary understanding on

the basic principles it would "inevitably" introduce another deadlock towards reaching agreement.[91]

Summary

The Conference recessed on December 20, 1962, with continued deadlock on banning nuclear weapon tests. This period started on November 26, 1962, after extensive United Nations debate and a mandate in the form of a General Assembly resolution that the Conference and the Nuclear Powers use everything in their power to conclude an agreement by January 1, 1963.

The majority of the time was spent in trying to find a path to break the deadlock on the test ban issue. The non-nuclear members made repeated suggestions, but none of them were accepted by the Nuclear Powers. The Soviet proposal for automatic seismic stations was the only new proposal that was introduced, but this was tied to the question of inspections. The period ended with the same deadlock as existed when it began.

Thus the Conference recessed without reaching agreement on the cut-off date proposed by the United Nations resolution.

V. THE FOURTH PERIOD FEBRUARY 12, 1963 - JUNE 21, 1963

Introduction

This period commenced on February 12, 1963, after a

the basic principles of small "inertially" increasing weather landing radiolis radiolis equipment.[7]

Summary

The Conference convened on December 20, 1921, with delegates limited to consider radiolis radiolis patents. This period started on December 21, 1921, after extensive debate during which time the delegates in the form of a general agreement concerning the distribution and the limited power the everything to limit power to countries be agreement to January 1, 1921.

The majority of the time was spent in trying to find a path to avoid the problems of the past and future. The conference leaders were expected disagreement, but some of the ways suggested by the United States. The United proposal for economic private radiolis radiolis was the only new proposal that was introduced, but time and time by the position of delegations. The United dealt with the same handicap as during some of meeting.

Some the conference resumed without assembly agreement on the proposal were presented by the United Nations delegations.

To. the United States Congress in 1922 -
June 21, 1922

Information

This period commenced on January 21, 1921, after a

recess from December 20, 1962. Fifty-two plenary sessions were held, but the Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests was not reconvened.

The period opened on a note of optimism following a series of private talks between the Nuclear Powers during the recess. However, even with the Soviet acceptance of the principle of on-site inspection and the use of automatic seismic stations to supplement national detection systems, agreement was not possible because of differences between the technical and political aspects of inspection. The basic positions that the sides held at the beginning of the period they still held at the end of the period.

A great deal of the discussion in the early part of the period was spent in trying to work out procedures to continue the debate on the test ban issue and also to discuss other issues of disarmament. With both sides deadlocked in their positions on the test ban, the Conference finally decided to discuss the nuclear test ban problem on Monday of each week and turn to problems of general and complete disarmaments at the other meetings.

The United States put forth comprehensive details of the technical aspects of its position on inspections, but the Soviet Union refused to discuss these details until there was agreement on principle.

The announcement of new private talks of the Nuclear

Powers in Moscow on July 15, 1963, added another optimistic note at the close of the period when the Conference recessed on June 21, 1963.

Opening Statements

United States review of the meetings held during the recess. At the 96th meeting on February 12th, the United States representative in his opening remarks stated

> that there is some reason to hope that a test ban agreement may be on the way, for it does seem to us that the basic ingredient of success--a desire for agreement by both nuclear sides may now exist.

He continued that an exchange of letters between President Kennedy and Premier Khrushchev had produced a new negotiating position where the one remaining obstacle to agreement remained the details of a verification system. The system seems to be in agreement, he said, and outlined it as:

> First, the system now under discussion is premised on the use of nationally owned and operated detection networks. Those national stations would submit data regularly and in a uniform manner to an international data collection centre. At the recent meetings in New York and Washington, the United States and the Soviet Union exchanged preliminary lists of seismograph stations from which the data-gathering arm of the verification system might be selected. Such selected stations in each others territory would form the basic network and the United States has given the Soviet Union a general description of the type of instruments used at each of the United States stations.
>
> The second element of the new verification system involves the use of automatically recording seismograph stations. Such stations could supplement the

data collected by national stations and could help to a degree in detecting, locating and identifying seismic events, thus improving the capabilities of the verification system. At private meetings which took place during the recess, the United States suggested ten sites in United States territory where automatic recorder might be located. The United States delegation furnished information on the average seismic noise levels at those sites. The Soviet Union accepted one of the United States sites declined the other nine, and requested two others in their place. The United States said that it did not object to the two alternative sites, and gave the Soviet Union noise level data for those two sites as well. The United States specified ten general areas within the Soviet territory where automatic recorders might well be located. The United States asked the Soviet Union to designate specific sites for automatic stations within those ten areas, to be recommended by the Soviet government on the basis of its knowledge of the noise level and other local factors. The areas specified by the United States included the areas of the three sites suggested by the Soviet Union but the United States did not accept the Soviet contention that there need only be three such automatic stations.

Later on, in private talks the United States suggested that its requirement might be met with seven automatic stations if satisfactory assurances could be obtained concerning the characteristics of Soviet national seismography network. There was no reciprocal response by the Soviet Union, which continued to state that the three sites specified in Chairman Khrushchev's letter of 7 January would be sufficient and that no additional sites could be contemplated. Noise level data for the three Soviet suggested sites were produced by the Soviet Union at the last session of the private talks.

The third element of the new verification system involves on-site inspections. The on-site inspection quota concept, first officially advanced by the Soviet Government in 1959 and then repudiated by it in 1961 has again been accepted by the Soviet Government.

The United States representative summarized the new status of a nuclear weapons test ban agreement by saying that "we have a new premise for negotiation, we are now

talking about a verification system based on national manned detection stations, automatic seismic stations and a quota of on-site inspections."

He concluded his statement by saying that

> we agree with the Soviet Union that the conclusion of a test ban treaty is a political act and, indeed, an act of the highest importance. We reject the Soviet contention, however, that the provisions for the control system can also be decided solely on a political basis, without regard for objective scientific considerations. We must therefore, continue to be guided by our best understanding of the current technical situation, and this will inevitably prescribe for us the outer bounds of any agreement.[92]

Soviet statement. The Soviet representative in his opening statement spent very little on the nuclear test ban issue. He said that the Soviet proposal to accept on-site inspection was truly a concession to the West which had repeatedly stated that they were ready to conclude an agreement if the Soviet Union accepted on-site inspection. He added, the Soviet Union still considers on-site inspection as unnecessary but "we are willing to give each side two or three to satisfy the fears and desires of the West."[93]

United Arab Republic Proposal

At the 99th meeting of the Conference on February 18th, the United Arab Republic representative proposed three methods of proceeding as alternative means in an attempt to break the present deadlock in the nuclear

weapons test ban negotiations. First, that the nuclear parties might submit new draft test ban treaties incorporating their ideas and formulations. Second, suggested that working papers might be produced setting out the background to or the outline of the Nuclear Powers thinking on the various problems in the test ban question. Third, if agreement on a quota number of inspection could not be reached immediately, for the time being this question could be put aside and the Nuclear Powers could proceed with the discussion of other pertinent and relevant problems.[94]

On the 20th of February at the 100th meeting, the United States representative stated in reference to the representative of the United Arab Republic's proposal for alternative procedures that the United States would agree to any one of the suggested procedures that were acceptable to the Soviet Union.[95]

The Soviet representative rejected the proposal on procedures outlined by the United Arab Republic by saying,

> flexibility, in our opinion should help towards finding ways to solving outstanding issues as quickly as possible, but if one takes flexibility to mean, and calls flexibility, an approach which leads the Committee away from solving the main issues, then we are opposed to such flexibility, we are opposed to such an approach.[96]

Deadlock Continues

United States reviews status of the negotiations.

At the 100th meeting on February 20th, the United States representative commenting on the progress of the Conference said that, although there appears to be a narrowing between the two positions, there also appears to be a deepening gulf which makes it more difficult to bridge.

He then outlined the latest steps that the West has taken to reach agreement. He described them as:

> (a) reduced substantially their requirements on an annual quota on on-site inspections.
> (b) agreed to remove their previous requirement that nationally manned control posts should be subject to international supervision and control.
> (c) agreed, provided the Soviet Union will supply data concerning the capability of its own national stations and will reaffirm its agreement of last summer to build new national stations where these are needed, to consider reducing to seven the number of automatic stations, they believed will be needed on Soviet territory.
> (d) agreed to accept reasonable figures on the extent of the area subject to inspection.
> (e) indicated their willingness to reach an accommodation with the Soviet Union regarding particularly sensitive military installations which might be located in an area to be inspected.

<u>Soviet views on the status of the negotiations</u>. The Soviet representative attacked the Western Powers for retreating from a position upon which they declared that agreement could be reached; that is, Soviet acceptance of the principle of on-site inspection. He added that previous statements of the Western representatives asking only that the Soviet Union accept the position they repudiated with the November 28, 1961, proposal implied

Western acceptance of the Soviet quota for on-site inspections of two to three per year. He accused the West of now naming eight to ten on-site inspections and couching this in the form of an ultimatum.

He closed his statement by saying that

> if their purpose is to protract the negotiations, if their purpose is to take advantage of the Soviet Union's constructive position in order to bargain for the greatest possible number of inspections, then we can straight out that nothing will come of this except delay.[90]

Soviet Union clarifies position. At the 101st meeting, the Soviet representative outlined the Soviet position in relation to the international elements of the proposed treaty. He stated them as:

> (1) Two to three on-site inspections a year on the territory of each nuclear power.
> (2) The installation of three automatic seismic stations on the territory of each nuclear power. The stations may also be situated on the territories of non-nuclear States, naturally with the consent of their governments.
> (3) The establishment of an international commission of scientists, as proposed by the eight non-aligned States members of the Eighteen-Nation Committee.

He repeated the Soviet view that on-site inspections are not necessary and that Soviet acceptance of this principle was done solely to facilitate agreement.

In regard to automatic seismic stations these, too, he said, were not necessary but were again put forward by the Soviet Union in an effort to reach agreement. He declared that the Soviet Union still contended that

national detection and identifying systems were scientifically capable of detecting and identifying all nuclear explosions.

In reference to the discussion of details and side issues, he said that the Soviet Union is opposed to such procedures because "if the basic issues are not settled it is impossible to settle them by discussion of other related issues."

The Soviet representative stated in conclusion that

> the Soviet Union remains firm in its conviction that despite the complication created by the actions of the United States at the present time there are still possibilities for reaching without delay an honest and fair agreement that would satisfy all parties.

The keynotes of the Soviet position he repeated were: first, national means alone ensure effective control over all types of tests; second, the number of on-site inspections and automatic seismic stations is not a subject for bargaining; and third, the guarantee of success of the negotiations lies in solving the basic issues.[99]

United States comments. The United States representative said that the Soviet position as it stands boils down to, that the number of on-site inspections is not negotiable and that acceptance of this number by the United States is necessary before anything else is discussed.

In regard to the number of inspections proposed by

the West, he said that there was a possibility of a misunderstanding but that in the letter that President Kennedy sent to Premier Khrushchev on December 28, 1962, he clearly stated the United States position as:

> With respect to the number of on-site inspections there appears to have been some misunderstanding. Your impression seems to be that Ambassador Dean told Deputy Kuzentsov that the United States might be prepared to accept an annual number of on-site inspections between two and four. Ambassador Dean advises me that the only number which he mentioned in his discussions with Deputy Minister Kuzentsov was a number between eight and ten. This represented a substantial decrease in the request of the United States as we had previously been insisting upon a number between 12-20. I had hoped that the Soviet Union would match this motion on the part of the United States by an equivalent motion in the figure of two to three on-site inspections which it had some-time ago indicated it might allow.

The United States representative also added that subsequent to this letter private talks were held in New York and Washington so there would not be any further misunderstanding about the number of inspections desired by the United States.[100]

Soviet Counter-reply. The Soviet representative in replying to the United States representative's statemant simply stated that in a conversation that he had with Ambassador Dean on 30 or 31 October 1962, Mr. Dean said that the main point about which we differed was underground tests. The Soviet representative then quoted Mr. Dean as saying, "If the Soviet Union were to agree to a small number, say two to four inspections, I assure you, that there

the Hour, it was that Lenin had a premonition of a volcanic upheaval that is the latter that Pravda [illegible] December 28, 1922, he clearly stated the United States position as:

> With respect to the question of re-entry diplomatic [illegible] to have been some misunderstanding. [illegible] Secretary Hughes that the United States might be prepared to accept as general basis of re-entry [illegible] between Lenin and Hughes. Subsequent [illegible] we state the only manner which is practicable [illegible] with Soviet Russia and Russia [illegible] a [illegible] in the [illegible] of the United States as we had previously been insisting upon a [illegible] 12-20. I did forget that the Soviet [illegible] would [illegible] on the part of the United States by an [illegible] in the [illegible] of the [illegible] which it had [illegible] in [illegible].

The United States [illegible] also added [illegible] subsequent to this Soviet [illegible] were held in Moscow [illegible] and Washington [illegible] would not be [illegible] the United [illegible] of [illegible] by the United States.[illegible]

Soviet Credibility. The Soviet representative in replying to the United States representative's statement simply stated that it a [illegible] that he had with [illegible] Moscow on 20 or 21 October 1922, the main point which the main point which on difference was [illegible] [illegible]. The Soviet representative then [illegible] by Moscow [illegible] [illegible] [illegible]

will be no more differences between us." The Soviet representative added that "of course, it was only an unofficial figure." However, he continued, further unofficial statements including those made to Professor Federov of the Soviet Union by Professor Wiesner of the United States, where the figure of two to three inspections was also mentioned and the official statements of the United Kingdom representative in this Conference also confirmed this Western position. He concluded that "the issue has been clarified and that it should not serve as an obstacle to our negotiations."[101]

United States Proposes Smaller Number of Inspections

At the 102nd meeting of the Conference on February 25th, the United States representative indicated that in private talks he had with the Soviet representative he explained the United States position on a number of the features of the inspection system. Also, he said the United States could accept an annual quota of seven on-site inspections if the Soviet Union was willing to accept the verification system envisaged by the United States.[102]

Views on Automatic Seismic Systems Aired

At the 103rd meeting on February 27th, the Soviet representative set forth the Soviet position on the use of automatic seismic stations. He said that the Soviet Union

sees the purpose of the stations is to verify the proper functioning of national networks for detection and identification of nuclear explosions. In order to fulfill this purpose, he explained, there is no need for a large number of stations. Soviet scientists, he continued, consider that more than three stations on Soviet territory would do "absolutely nothing more to verify the proper functioning of national networks."[103]

At the 108th meeting on March 13th, the United States representative outlined the United States views on the role of the automatic seismic stations.

He stated that the Western Powers envisaged that the Nuclear Powers would supply sealed recorders and certain sealed instruments for automatic stations. The stations, he continued, would be built according to agreed specifications by the host country, and the host country would assume certain maintenance responsibilities in conjunction with the stations. Data, he explained, would be picked up and the instruments maintained and checked by personnel from the other side and from the international commission, a maximum of eight times yearly. He continued that duplicate recorders outside the stations would record duplicate data and host country personnel would pick up and transmit this data to the international commission for its own use and for transmission to the other side.

same the purpose of the studies is to verify the proper functioning of national systems for detection and identification of nuclear activities. In order to fulfill this purpose, it maintained, there is no need for a large number of stations. Civil scientists, in contrast, consider that more than three stations on Soviet territory would be "absolutely nothing more to verify the proper functioning of national networks."[11]

At the 15th meeting in Paris 1[illegible], the United States representative outlined the United States view on the role of the seismic seismic stations.

He stated that the various foreign scientist that the Soviet Union will select could conduct and control seismic instruments for seismic activity. The stations, he continued, would be built according to agreed specifications by the host country, and the host country would assume certain maintenance responsibilities in connection with the stations. Data, he explained, would be placed on and the instruments maintained and checked by personnel from the other side and from the international commission, a section of eight times yearly. He continued that duplicate recordings within the stations would remain facilities data and that control personnel would also be and transmit this data to the international commission the two use and for transmission to the other side.

The United States, he said in summary, has proposed that seven such stations be built and operated in the Soviet Union.[104]

Debate on Procedures Continues

United States outlines views on procedures. At the 104th meeting, the United States representative outlined the United States on procedures which the Conference should follow to reach an agreement on the nuclear weapons test ban issue. He stated that the Western position was, "that we wish to discuss concurrently with the question of the annual quota of on-site inspections, the question of when, where, how and by whom inspections are to be carried out." This procedure, he argued, would make it easier to find a mutually acceptable number of inspections.

In regard to the Soviet claim of the ability of national systems to detect and identify all nuclear explosions, he stated that this is scientifically unfounded, and called on the Soviet Union to produce the scientific proof to support their claim.

In conclusion, he said that Soviet answers to the questions on criteria to locate events; on how will they be selected for inspection within the quota; on the size and shape of the inspection area; on how the inspection will be carried out; and the composition of the inspection

are necessary because they have a direct relation to the meaningfulness of any inspection quota.[105]

Soviet views. The Soviet representative rejected the United States proposal for consideration of related or technical issues and repeated former arguments that to discuss administrative or technical questions without agreement on the main question "we would need not only days but many weeks and months, perhaps even years, of technical discussion."

In conclusion, he stated that the only path to agreement is to agree on the comprehensive conditions which the Soviet Union has put forth because they are an acceptance of "Western proposals in their entirety."[106]

Western views of Soviet stand on technical issues. On March 6th, the United States representative, commenting on the Soviet rejection of the proposal to discuss the related technical details of the inspection issue, denied that they would lead to further deadlock and delay. He continued that the United States could not view the one item of on-site inspection quota in complete isolation from all the other factors relevant to the issues. He explained that these factors will determine the relevancy of the number selected of its adequacy in the system of verifying observance of the treaty.

In conclusion, he said, "frankly, we are now somewhat

at a loss about how to proceed on this question if our negotiating partners refuse to discuss most of the unresolved questions and post an ultimatum on the one issue which they will discuss."[107]

Soviet counter-reply. The Soviet representative simply stated that the Soviet Union was not opposed to discussing the technical issues at once

> just as soon as we see that the United States is willing to reach agreement on the basis of the compromise proposals for a quota of two to three inspections and the number of automatic seismic stations.[108]

Views of the Eight Non-Aligned Members

The Mexican representative summarized the position of the eight non-aligned members of the Committee at the 109th meeting on March 15th.

He began his statement by saying

> the negotiation of a treaty when the sides concerned fear and distrust each other and when a struggle for prestige is involved, when each attributes to the other secret and malicious intentions, is a task requiring great patience and immense tenacity. /He added,/ only the clear realization that a fundamental and common interest which transcends all differences is at stake can persistence in this task be possible.

This, he contended, is the political climate in which the Conference finds itself, and such are the circumstances in which an attempt to negotiate a nuclear weapons test ban is being made.

He accused the Nuclear Powers of sincerely desiring an

as a less absurd hope to proceed in this speculation if one respectfully requests refuge to discuss some of the universal possibilities and just as ultimatum on the one issue which they will discuss.[177]

Foreign commitments. The Soviet representative sharply stated that the Soviet Union was not prepared to discussing the territorial issues at such

> Just as soon as we saw that the United States is willing to reach agreement on the basis of the elementary principle for a period of two to three inspections and the number of necessary seismic stations.[178]

Views of the Third Disarmament Conference

The Russian representative emphasized the problem of the eight non-aligned members of the Committee at the last meeting of years ago.

He began his statement by saying

> The negotiation of a treaty when the sides concerned then and learned much older and when a security for peoples is involved, when such situations be the other secret and military intelligence, is a task requiring great patience and immense vigilance. The social only the same realization that a practical and common interest which transcends all differences is at stake and participation in this task be possible.

This, he continued, is the political climate in which the Conference plays itself, and will be the circumstances in which we attempt to negotiate a nuclear weapons test ban is being made.

He answered the Western Powers of already reaching an

agreement but this desire was "feeble, weak and incomplete," a desire he said "subject to so many conditions, promises and provisos that it lacks any creative power."

He continued that the distance that separates the Nuclear Powers from agreement does not depend and is not measured by the difference between the number of inspections. The distance, he said, is a question of will, the willingness to negotiate all controversial points. He continued,

> A solution depends on the evaluation which each side makes of, and the importance it attaches to, the urgent settlement of these problems, and the political appraisal, right or wrong, which it makes of the consequences of failure.

He stated further that "whether we admit it or not, whether we like it or not, the cessation of nuclear tests is the basis and a prerequisite for any progress in the various aspects of general disarmament."

To show that this was the sentiment of the non-aligned members, he quoted statements of the other non-aligned representatives supporting this position.

> The Burmese representative said at the 1054 meeting, "first things must come first. And the cessation of nuclear tests comes first . . . . "
> The Swedish representative also stated at the 1004 meeting, "My delegation also fully endorses the view that the conference must concentrate its immediate efforts on the test ban issue."
> The Indian representative said, "We are here to achieve agreements on general and complete disarmament . . . . But there is a logic of events; and the logic of events at this moment is such that it gives priority to the question of a test ban."

The Ethiopian representative stated, "that his delegation . . . associates itself with the determination, widely expressed, to make headway in the task entrusted to this Committee: First, by solving the remaining problems that divide the Nuclear Powers on the question of a test ban treaty;".

The Brazilian representative said at the 103rd meeting that "Even had we desired to give priority in our discussions to other important problems, it would have been difficult for the Conference to direct its interests temporarily from the questions of tests . . . ."

At the 98th meeting the representative of Nigeria had this to say, "My delegation has at all times maintained that it is pointless talking about disarmament unless an effective stop is put to the perfection of these diabolical weapons of mass annihilation and naked aggression against humanity."

And finally, the representative of the United Arab Republic said at the 99th meeting that "I feel it my duty, however, to state frankly that our study of disarmament problems in the absence of the long cherished and now feasible test ban agreement, or at least in the absense of favourable signs for its solution, will remain, to say the least, largely academic."

The Mexican representative continued and accused the Nuclear Powers of not giving adequate consideration to the views and proposals submitted by the eight non-aligned members of the Conference.

He then proposed, for the time being, a provisional agreement to suspend underground tests, which will permit banning of tests in the three environments where no international control is required since the national means are sufficient to identify "explosions." However, he added, this provisional agreement would not be an uncontrolled moratorium "as the principle of on-site inspection has been accepted." This agreement, he continued, would enable

The [illegible] representative [illegible], "that his delegation . . . associates itself with the [illegible] already [illegible] to make [illegible] in the [illegible] expressed in this [illegible]. First, by solving the [illegible] problems that arise from the [illegible] on the [illegible] of a [illegible] [illegible]".

The [illegible] representative said at the [illegible] meeting that "[illegible] we decide to give priority in our discussions to other important problems, it would have been difficult for the [illegible] to divert its [illegible] [illegible] from the [illegible] of [illegible] . . . ."

At the [illegible] meeting the representative of Nigeria had [illegible] by say, "If delegations [illegible] at all times [illegible] [illegible] [illegible]

the setting into motion the complicated machinery of the international commission as proposed by the Eight-Nation Memorandum. Further, he said, this agreement could be established for a definite time limit.

In conclusion, he summarized, the position of the eight non-aligned members as desiring that all possible ways to reach an agreement be explored; but if a comprehensive and definite treaty cannot be attained in a short time, then the possibilities of a provisional agreement should be considered.[109]

Soviet comments. The Soviet representative in his comments on the position of the non-aligned said that the Soviet Union was in complete agreement with the urgency and desires of the world that an early agreement be reached, but the inflexible United States position prevents the reaching of early agreement.[110]

United States comments. The United States representative denied the Soviet charge of inflexibility and charged that it was the Soviet Union because of its failure to give its views on necessary related issues that is preventing progress in the negotiations.[111]

Debate Over On-Site Inspections and Control

On April 1st, the United States representative at the 116th meeting summarized the United States position in relation to on-site inspections as follows:

First, we believe that each nuclear side should designate the events it wishes to inspect in the territory of the other, submitting seismic data to locate the event and indicating that it cannot be identified as an earthquake according to agreed criteria.

Second, it will be necessary to arrive at agreement on the scientific criteria which would be used to determine whether an event had been located and could not be identified as natural in origin. Past negotiations with the Soviet Union resulted in considerable agreement in that area, and we ask the Soviet representative to reaffirm the points of agreement reached earlier and to work out understandings on the points not previously agreed upon.

Third, we believe that after the country in whose territory a designated event has taken place has had an opportunity to present additional data concerning the event, and there has been an opportunity to consider the data obtained from the automatic stations, the other nuclear side should make the decision whether to select the event for on-site inspection within the quota of inspections.

Fourth, we have proposed that the area to be inspected be an ellipse with the semi-major axis of not more than 15 kilometres and an area of not more than 500 square kilometres.

Fifth, we have proposed that certain important functions of inspection teams be performed by technical experts from the nuclear side in order to maximize the deterrent and confidence building effect of inspection. In addition, we have outlined what operations the team might actually perform within the inspection area.

Sixth, we have proposed various safeguards for the security of the host country including exclusion of sensitive defense installations from the inspection area and provisions to ensure that members of inspection teams or foreign personnel visiting unmanned seismic stations do not have the opportunity to engage in improper activities.

Seventh, we have indicated that a discussion of all these points, not in minute detail but in broad outline, will be of assistance in arriving at a parallel agreement on another main issue; the actual number of on-site inspections.[112]

<u>Soviet Views on the Control Organization</u>. Also, at the 116th meeting on April 1st the Soviet representative

summarized the current status of the negotiations and the Soviet concept of the control organization.

He stated that the actual situation is characterized by the fact that the positions of the two sides have drawn closer together. First, he said, by the admission of the United States "that national systems are adequate for control over agreement." This, he argued, is supported by the fact that the United States will accept agreement on prohibition of tests in the atmosphere, outer space and underwater. In regards to underground explosions, he added, this problem could have been solved the same way. However, he said, the United States put forward demands for inspection of suspicious seismic events. To facilitate agreement, the Soviet representative declared, the Soviet Union agreed to two to three inspections per year although they are not necessary. However, the Soviet concession to the United States, he remarked, has not been accepted, and the deadlock continues.

As to the control organization, he said, it now contains eight components:

> (1) The national observation networks of the Nuclear Powers.
> (2) The national observation networks of other non-nuclear Powers, that is socialist countries and countries forming part of the Western military blocs.
> (3) The national networks of the non-aligned countries.
> (4) The network of United States seismic stations scattered over foreign countries, mainly around the boundaries of the Soviet Union.

examiner the present status of the communications and the future concept of the central organization.

In stating that the central elements in Chairman-

tatives by one that does the positions of the two sides have been closer together. First, in a bid, by the administration to the United States "that national systems are adequate for control over Kaohsiung." This, he stated, is supported by the fact that the United States will accept agreement on availability of bases in the Philippines, Okinawa and Taiwanese. In addition to international explanations, in addition, this problem could have been solved the same way. However, in sum, the United States for forward bases for Kaohsiung of surplus military stocks. To facilitate agreement, the Taiwan representative declared, the United States agreed to try to give Taiwanese the per airbase capacity not necessary. However, the total commitment to the United States, or inferior, for its own security, and the Chinese continues.

As to the central organization, he said, it has two-fold rights concerned:

(1) The national observation authority of the military forces.

(2) The national observation authority to allow non-military forces, such as military supplies and equipment forming part of the military military plan.

(3) The national authority of its subordinate commanding.

(4) The authority to United States military station established over Taiwan (Taiwan); notify around the boundaries of the Korean Sector.

(5) The installation of three seismic stations each on the territory of the Soviet Union and the territory of the United States.

(6) The installation of seismic stations on the territory of countries adjacent to the Soviet Union and the United States.

(7) An international centre for collecting and processing data received from national observation systems and automatic seismic stations.

(8) An agreement on two to three on-site inspections a year on the territory of the nuclear powers.

The Soviet representative continued that the control system "taken as a whole, is sufficiently many sides and reliable to ensure confidence that a nuclear test ban treaty is being complied with."

In regards to the United States insistence that discussion of technical details and its exposition of its views on this aspect, the Soviet representative said, "we shall not go along that path and shall continue to insist on the solution of the question of the inspection quota."[113]

United States Analysis of the Soviet Position. At the 119th meeting of the Conference on April 5th, the United States representative analyzed the Soviet position and their arguments to support it. He said that the Soviet representative had followed three major lines of argument in the support of the Soviet position. These he outlines as: first, sought to defend the procedural stand on the basis that "the West wished to avoid agreement by engaging the Conference in what he frequently termed as a morass of technical details"; second, he has alleged that the West

actually proposed the numbers upon which the Soviet Union now insists "we must agree if there is to be a nuclear test ban treaty"; and third, the Soviet representative and his allies have dredged up numerous misrepresentations of previous Western positions on the technical and scientific basis for on-site inspection, to seek to undercut the importance of scientific factors in the question of on-site inspections.

The United States representative continued that the Soviet maneuvers had failed because of several factors: first, they have not shown what they have sought to show, that the Western position ignored the scientific and technical factors which make it possible to form a realistic judgment about the size of the quota of on-site inspections and the effectiveness of such a quota; second, their extensive quotation from Western scientific sources gave credence to the Western position that there will be a number of unidentified events which can be identified only by on-site inspections; and third, they have not produced any new Soviet scientific data to support their case.

The United States representative in concluding his statement asked the Soviet Union to review its own position to see if there is not some "small flexibility which we in the West have shown."[114]

Soviet Union defends its position. The Soviet representative in replying to the United States representative's analysis of the Soviet position and argumentation simply stated that the statement had not disproved the Soviet position. He added that it only managed to refute the statements of prominent scientists and officials in the United States. He repeated his previous arguments that the only course to follow was to settle the main issue and this had been greatly aided by the Soviet compromise proposals.[115]

Soviet analysis of the United States position. At the 126th meeting of the Conference on April 29th, the Soviet representative summarized the Soviet interpretation of the United States position. He summarized it as:

> Having admitted the effectiveness of national means of control in regard to underground nuclear explosions, the United States lapsed into an obvious inconsistency in its position, an inconsistency which has in fact led our negotiations on this question once more again into an impasse. The point is that, having recognized the effectiveness of national systems of control in regard to underground nuclear explosions, the United States ought to have abandoned completely all claims in respect of on-site inspections. At the present time the demand for on-site inspections is untenable and unnecessary from the standpoint of control.[116]

United States defense of its position. At the 131st meeting on May 13th, the United States defended the United States position. He said the statement by the Soviet representative lead to the following conclusions: first, the West must agree with the Soviet position or the

conference was just a "waste of time"; second, "the Soviet representative appears to be laying the foundation for another grand retreat along the lines of the last grand retreat of the Soviet Union from the principle of on-site inspection on November 28, 1961"; and third, the failure of the Soviet Union to spell out the arrangements under which it would accept inspections raises "real doubts about whether the Soviet Union has re-accepted the principle of on-site inspection."

In conclusion, the United States representative said,

> Unfortunately, the Soviet representative seems intent on diverting our attention from our main effort, which should be to discuss and agree upon the main portions of a treaty which would ensure the effective cessation of nuclear weapon testing. He has used arguments which add up to an ultimatum, and then attempted to place the burden for lack of progress on the West. He has claimed that his positions are purely political, but he has tried to distort the statement of eminent Western scientists in order to somehow technically to prove his case. In each of those instances he has, of course, tried to divert the attention of the Conference from the weakest part of the Soviet position, which is the absolute lack of flexibility shown here by the Soviet Union and complete failure of the Soviet Union to put forward concrete positions on most of the outstanding issues of a nuclear test ban treaty.[117]

<u>Soviet Union reaffirms the Soviet position</u>. At the 1438 meeting on June 17th, the Soviet representative continued to argue the Soviet case that national systems alone are capable of detecting nuclear explosions and there is no need for international control and on-site inspection.

He repeated the pledge of the Soviet Union that she would faithfully comply with its obligation not to test after agreement and that all inspections teams would conclude after inspection of an event in the Soviet Union would be "that an earthquake had occurred."

He continued to argue that the demand for inspection by the Western Powers was not based on scientific fact but was just a desire to gather intelligence information within the Soviet Union.

He further accused the West of replacing the question of cessation of nuclear weapon tests with the question of inspection.

In conclusion he said,

> an agreement on the prohibition of all nuclear weapon tests forever can be signed without delay. Control over compliance with this agreement can be fully ensured, by national means for the detecting of underground nuclear explosions. In addition a limited number of automatic seismic stations can be used. All this represents a reliable guarantee for the purpose of discovering any possible attempt to violate an agreement on the prohibition of nuclear weapon tests. Here we have the basis which enables us to conclude an agreement immediately. We are ready to sign such an agreement. It is now up to the Western Powers.[118]

<u>African Members Submit Memorandum on the Test Ban Issue</u>

At the 142nd meeting on June 10th, the representatives of Ethiopia, Nigeria, and the United Arab Republic introduced a joint memorandum on the cessation of nuclear

weapon tests. This memorandum put forth the following suggestions and considerations for the Nuclear Powers:

> . . . that direct contacts between the nuclear Powers, for example on the Foreign Ministers level, and possibly direct communications and contacts between the Heads of the Nuclear States and Governments, may prove of great value in reaching a quick and adequate solution of the problem.
>
> . . . Various non-aligned delegations to our Committee, during the last three months produced many valuable ideas and thoughts which are well-known to the nuclear Powers, and which aimed at breaking the deadlock in the Geneva test-ban negotiations about the number of inspections as well as about the method of discussing the quota figures in relation to the study of the modalities of inspections. The three African delegations earnestly appeal to the nuclear Powers to give attention to those non-aligned ideas and thoughts as well as to their continued attempts at finding practical, honourable and equitable compromises, which, in the last analysis, may prove to be good and lasting solutions to the test ban problem.
>
> . . . Chairman Khrushchev and President Kennedy's exchange of letters in December and January on the cessation of tests has given proof of the existence, on both sides, of a welcome spirit of constructive compromise and mutual accommodation and above all, of courage and goodwill.
>
> . . . It may very well be that science may, in the future, show beyond doubt that on-site inspections may no longer be needed to identify suspicious seismic events or to adequately control a test ban treaty. For the time being, however, the three African delegations recognize that three, four or so, yearly truly effective inspections may be needed to dispel mutual suspicions, to help build up confidence between the nuclear Powers, and no less importantly, to facilitate their reaching a practical political settlement.
>
> . . . After having maintained that there was no need for any obligatory inspections, Mr. Khrushchev's offer last December of two or three on-site inspections must therefore be taken as a sign of moral courage and good faith. In a like manner, the current British-American demarches at Moscow, and their offer of the possibility of further compromise, should be encouraged and taken as a sign of political courage and goodwill.

. . . The three African delegations are convinced that they speak not only for their own peoples and all the African peoples, but for the whole world, when they urgently appeal to the nuclear Powers to give more proof of a much needed sense of practicality and of a necessary spirit of constructive compromise and goodwill. The world will hail and appreciate any show of compromise as evidence of great moral courage, political acumen and love for peace. On the other hand, the world cannot but consider their failure to compromise over the last few remaining differences as unwillingness on their part to end nuclear testing and the nuclear armaments race, essential conditions for any constructive and realistic discussion of general and complete disarmament.

. . . Since there is general agreement, however, that the number of on-site inspections is less relevant than the terms of the modalities or conditions for the adequate and effective conduct of such on-site inspections, the three delegations therefore exhort the nuclear Powers to rise above quarrelling on an unsignificant difference of one or two inspections and to accept a reasonable compromise-quota of inspections contingent upon adequate and effective modalities on inspection.

. . . Agreement on the latter should be sought *inter alia* in these illustrative areas:

(a) The location of the epicentre of the seismic event;

(b) Criteria for the eligibility of the seismic event for inspection;

(c) Composition of the International Scientific Committee and its role in the establishment of the criteria and the supervising of their proper application;

(d) Agreement on the initiation of inspection according to agreed criteria and to the data submitted to the International Committee;

(e) The composition of the inspection teams in such a way as to obviate self-inspection and to ensure the effectiveness and adequacy of the visit.

(f) Agreement on the criteria and relevant details of the actual conducting of the inspection;

(g) Agreement on the shape and size of the inspection area;

(h) Safeguards against abuse and against the utilization of such facilities and inspection personnel in any manner that might be extraneous to the purpose of identifying the event concerned or that might endanger the security of the receiving State.[119]

Announcement of Moscow Talks

At the 143rd meeting of the Conference on June 12th, the Indian representative in his capacity as Chairman introduced the statement of President Kennedy which he made at The American University on June 10th in Washington, D. C. where he said,

> . . . . Chairman Khrushchev, Prime Minister Macmillan and I have agreed that high level discussions will shortly begin in Moscow looking toward early agreement on a comprehensive test ban treaty. Our hopes must be tempered with the caution of history but with our hopes go the hopes of mankind.[120]

The Indian representative added that this agreement between the President of the United States, the Chairman of the Council of Ministers of the Soviet Union and the Prime Minister of the United Kingdom, "shows their joint determination and will to reach agreement on the test ban issue - an agreement which has been under consideration for five years at Geneva."[121]

The United States representative commented further on President Kennedy's speech in reference to the test ban issue; he quoted the President as saying, "a fresh start is badly needed." He continued,

> not only would this first step measure mark a turning point in the upward spiral of the arms race, but it would also be a measure to begin to meet head-on the problem of the proliferation of nuclear weapons. In addition, an effective nuclear test ban would also end whatever harmful effects there may be from the radioactive fallout resulting from nuclear testing.

The United States representative continued that the

Announcement of Theme Talks

At the joint meeting of the conferences on Home Life, the Italian representative in his capacity as Chairman introduced the statement of Twelfth Tuesday which he made at The American University on June 12th in Washington, D. C., where he said,

> "I am a Catholic housewife, and Italian Ambassador and I have opened this high level discussion with admiring words to Madame Lebrun concerning her approach to a comprehensive test for family. Her judge must be impaired with the evaluation of history but which was proper to the cause of mankind."

The Italian representative added that this agreement between the Twelfth of the Second Sunday, the Jubilee of the Council as a visibility of the Invited Italian and the Italian Ministry of the Italian Congress. Those Italia Joint Commission and will to which agreement in the Week Conference – in agreement which has been found Commission. For fifty years as Jubilee."[11]

The United States representative commented further on Pontiff Tuesday's speech in which he said the Pope had issued the question the Pontiff on Tuesday. "A Pope also is daily caution." he continued,

> "and only would this place your meeting such a meeting place in the United Nations at the same time, but it would also be a meeting to begin to meet Italians the problem of the availability of nuclear weapons. In addition, we effectively believe that the world also need children's medical activity Italy may be in the Italian and Italian Pontiff Pontiff Pope Italian Italian.

The United States representative continued that the

United States President in his speech had also pointed out two steps that had been taken towards ensuring renewed efforts to reach agreement. First, that the United States would not conduct tests in the atmosphere if other States do not do so. "We will not be the first to resume," he quoted President Kennedy as saying. Secondly, the United States announced that it had agreed with the Soviet Union and the United Kingdom to hold high level talks in Moscow to work towards reaching final agreement on a comprehensive test ban agreement. Thus, he concluded, the United States is taking steps to assure the best climate and the highest priority to reaching an agreement on a comprehensive nuclear weapon test ban.[122]

At the 144th meeting on June 14th, the Soviet representative briefly referred to President Kennedy's speech when he said,

> President Kennedy's speech inspires the hope that the effort being made both within and outside our Committee to improve the international situation, to create an atmosphere of confidence among countries, and to embark upon practical implementation of disarmament measures, will not be in vain.

He added, however, that "all of us are waiting for President Kennedy's thoughts and views on peaceful coexistence to be put into practice." He emphasized in this regard that the United States can rely on the full support and cooperation of the Soviet Union.[123]

United States President in his speech and also pointed out how steps that had been taken towards security reduced efforts to reach agreements. Later, when the United States would not consider bases in the Mediterranean if other treaties do not do so, "We will not be the first to remove" the greater strategic security of Soviet. Secondly, the United States announced that it had agreed with the Soviet Union and the United Kingdom to hold high level talks in Moscow to meet immediate existing final agreement on a comprehensive test ban agreement. Thus, in conclusion, the United States is ready then to assure the best climate and the highest priority to negotiating an agreement in a cooperative manner that can.[10]

At the time meeting on this ion, the Soviet representative briefly referred to President Kennedy's speech when he said,

> President Kennedy's speech inspires the hope that the efforts being made both within and outside the United Nations to improve the international situation, to create an atmosphere of confidence among countries, and to reduce upon practical implementation of disarmament measures, will not be in vain.

He added, however, that "it is not in our nature for President Kennedy's champions and claims as peaceful coexistence to be just idle phrasing." He emphasized in this regard that the United States can rely on the full support and cooperation of the Soviet Union.[11]

Conference Recesses

The 147th meeting on June 21st brought this period to a close. The closing statements of the members of the Committee indicated a general feeling of optimism particularly by the non-aligned members.

The Swedish representative commented that the Moscow negotiations will be "the centre of our attention and our hopes." He continued, "we hope that the nuclear Powers now at long last will succeed in reaching a test ban treaty, indeed, we more than hope, we expect that they will succeed."[124]

The Burmese representative suggested that it might perhaps be useful for the Moscow conference negotiators to review the suggestions offered, jointly or singly, since February in this Conference by the non-aligned members, including the latest joint memorandum by the African delegations. In conclusion, he said that reflection on these suggestions and proposals should not interfere, conflict or intrude upon the Moscow talks. And he added, "today a test ban is timely, tomorrow it may be too late."[125]

The Nigerian representative commenting on the test ban issue

> . . . considerations of a technical, military and economic nature . . . have made it not only a necessity but almost a sine qua non that agreement of a test ban must be reached now. It is therefore, our hope that the impending high level talks between

the nuclear Powers in Moscow will bear the much awaited fruits.[126]

The Indian representative commented that the latest African memorandum should be given favorable consideration at the Moscow talks. He said in conclusion, "we here in the Committee, and the world at large, therefore look forward with great expectation to the success of these talks."[127]

The Western and Soviet bloc representatives confined their comments to the problem of general and complete disarmament which indicated that the issue of the test ban agreement had been reserved for the forthcoming high level talks in Moscow on July 15th.

Summary

Thus, the fourth period of the Conference of the Eighteen-Nation Committee on Disarmament came to a close on June 21, 1963, after fifty-two plenary sessions.

Although the nuclear weapon test ban issue was given wide discussion, there was no change in the basic positions of the Western Powers or the Soviet Union. The Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests was not reconvened during this period although the United States had repeatedly requested it.

A great amount of time of the initial meetings was occupied with the problem of procedures, and it was finally resolved that the Monday meetings would be devoted

[illegible] Foreign will [illegible] the [illegible] [illegible].

The Senior representative commented that the latest [illegible] [illegible] should be given favorable consideration at the Foreign Ministers. In order to conclusion, [illegible] [illegible] the [illegible], and the [illegible] at [illegible], therefore [illegible] [illegible] with [illegible] [illegible] to the [illegible] [illegible] [illegible].

The Foreign and Soviet Sino representatives confirmed their concurrence to the proposal of [illegible] and [illegible] discussion which indicated that the issue of the [illegible] had been [illegible] for the forthcoming high level talks in Moscow on July 12th.

Jamaica

Then, the Jamaica [illegible] of the [illegible] [illegible] [illegible] on June 21, 1961, after [illegible] [illegible] [illegible].

Although the [illegible] [illegible] that [illegible] [illegible] [illegible]

to discussion of the nuclear weapon test ban issue, but a delegation could discuss whatever it wanted at any meeting. Therefore, during this period there was much more debate on other issues of disarmament and the time used on the nuclear weapon test ban issue was spent in using old arguments to support deadlocked positions particularly by the Soviet Union and its allies.

The United States did attempt to get technical details of inspection discussed and did put forward comprehensive views on this subject, but the Soviet Union refused to discuss these issues until acceptance of the Soviet position on on-site inspections of two to three a year.

The period ended on somewhat of an optimistic note with the announcement of the high-level talks between the Nuclear Powers on the nuclear weapon test ban issue scheduled for mid-July. However, the last Soviet statements in the Conference did not indicate any change in the Soviet position in reference to the main stumbling block--the problem of inspections.

The Conference was recessed following the meeting on June 21 and was scheduled to reconvene on July 30, 1963.

VI. SUMMARY OF THE EIGHTEEN-NATION COMMITTEE ON DISARMAMENT

On June 21, 1963, the Conference of the Eighteen-

to discussions of the nuclear weapon test ban issue, has a disparaging moral connotation relative to neutral or any meaning. Therefore, during this special times was much more taboo or other issues of disarmament and the time used to the nuclear weapon test ban issue was known in early 1962 appears to suggest heightened sensitivity particularly by the Soviet Union and its allies.

The United States did attempt to get technical details of Soviet proposed and all was toward temperamental view on this subject, but the Soviet union refused to discuss these issues until acceptance of the Soviet position on outside inspections of two to three years.

The Soviet model is somewhat of an optimistic tone with the accomplishments of the high-level talks between the nuclear powers on the nuclear weapon test ban issue. Nevertheless the sensitivity. However, the last Soviet statements in the Conference did not indicate any change in the Soviet position in reference to the main stumbling block: the problem of inspections.

The Conference was terminated following the meeting on June 21 and was adjourned to resumeness on July 30, 1963.

VI. SUMMARY OF THE CONFERENCE-SETTING COMMITTEE IN RETROSPECT

On June 21, 1963, the Conference of the Eighteen-

Nation Committee on Disarmament recessed after one hundred and forty-seven plenary meetings had been held. This brought to a close the investigation of the nuclear weapons test ban negotiations. However, the Conference has not been adjourned and is scheduled to reconvene on July 30, 1963.

During these one hundred and forty-seven meetings of the Conference which had their beginning on March 14, 1962, numerous discussions have been held, many proposals have been made, but no agreement on a nuclear weapons test ban could be reached.

The establishment of the Subcommittee for a Treaty on the Discontinuance of Nuclear Weapon Tests on March 21, 1962, provided a forum for the three Nuclear Powers, but after fifty meetings they could not reach agreement and since December 18, 1962, no further meetings have been held.

The positions of the two sides have undergone some change, but the problems of technical details and inspection still are keeping the Nuclear Powers from finally reaching agreement.

The non-aligned members of the Committee put forward numerous suggestions and proposals on how the Nuclear Powers should proceed to reach agreement but none were adopted. The Eight-Nation Memorandum which they introduced

within Canadian civilization[illegible] [illegible] and [illegible] [illegible] [illegible]

on April 16, 1962, as a compromise solution provided a great deal of discussion because of differences of interpretation, but no agreement.

Thus the Conference of the Eighteen-Nation Committee on Disarmament did provide a forum for the continuing search for agreement on a nuclear weapons test ban after the adjournment of the Conference on the Discontinuance of Nuclear Weapon Tests on January 29, 1962.

CHAPTER IV - FOOTNOTES

[1]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Second Meeting, ENDC/PV.2.

[2]Ibid., Verbatim Transcript of the Fifth Meeting, ENDC/PV.5.

[3]Ibid., Verbatim Transcript of the Sixth Meeting, ENDC/PV.6, March 21, 1962, p. 20.

[4]Supra, pp. 151-152.

[5]Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the First Meeting, ENDC/SC.1/PV.1, March 21, 1962, pp. 4-7.

[6]Ibid., pp. 7-10.

[7]Ibid., Verbatim Transcript of the Second Meeting, ENDC/SC.1/PV.2, March 22, 1962, pp. 3-9.

[8]Ibid., pp. 9-16.

[9]Ibid., Verbatim Transcript of the Fourth Meeting, ENDC/SC.1/PV.4.

[10]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Thirteenth Meeting, ENDC/PV.13.

[11]Ibid., pp. 47-49.

[12]Ibid., Verbatim Transcript of the Fourteenth Meeting, ENDC/PV.14.

[13]Ibid., Verbatim Transcript of the Fifteenth Meeting, ENDC/PV.15, April 4, 1962, pp. 5-14.

[14]Ibid., pp. 15-26.

[15]"Joint Statement by President Kennedy and Prime Minister Macmillan to Premier Khrushchev, April 9, 1962," International Negotiations on Ending Nuclear Weapon Tests September 1961 - September 1962 (Washington: Government Printing Office, 1962), pp. 208-209.

[illegible] of a [illegible]

[1]Conference of the [illegible]-[illegible] Committee on Disarmament, Working Transcripts of the Seventy-Second Session, DSCC/TT.72.

[2]Ibid., Verbatim Transcript of the [illegible] Session, DSCC/TT.73.

[3]Ibid., Working Transcript of the [illegible] Session, DSCC/TT.74, March 21, 1963, pp. [illegible].

[4]Ibid., pp. 123-127.

[5]Conference of the [illegible]-[illegible] Committee on Disarmament, Documentation on a Treaty for the Cessation of Nuclear Weapon Tests, Working Transcript of the First Meeting, DSCC/C.117/1, March 21, 1963, pp. [illegible].

[6]Ibid., pp. 3-10.

[7]Ibid., Verbatim Transcript of the Final Session, DSCC/C.117/1, March 21, 1963, pp. [illegible].

[8]Ibid., pp. 7-16.

[9]Ibid., Verbatim Transcript of the Joint Meeting, DSCC/C.117/1.

[10]Conference of the [illegible]-[illegible] Committee on Disarmament, Working Transcript of the Twelfth Session, DSCC/TT.12.

[11]Ibid., pp. 47-49.

[12]Ibid., Verbatim Transcript of the Conference Meeting, DSCC/TT.13.

[13]Ibid., Verbatim Transcript of the Plenary Meeting, DSCC/TT.12, April 4, 1962, pp. [illegible].

[14]Ibid., pp. 12-14.

[15]Joint Statement by President Kennedy and Prime Minister Macmillan in Nuclear Exchange, April 8, 1962, Department Statements on Ending Nuclear Weapon Tests, Department [illegible] - Documents [illegible] Disarmament Conference Meeting Series, [illegible], pp. [illegible].

[16]"Letter from Premier Khrushchev to Prime Minister Macmillan, April 12, 1962 (excerpts)," International Negotiations on Ending Nuclear Weapon Tests September 1961 - September 1962, op. cit., pp. 209-212.

[17]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Nineteenth Meeting, ENDC/PV.19, April 12, 1962, pp. 18-21.

[18]"Statement of the Department of State, April 12, 1962," International Negotiations on Ending Nuclear Weapon Tests September 1961 - September 1962, op. cit., p. 215.

[19]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Twenty-First Meeting, ENDC/PV.21, April 16, 1962, pp. 20-22.

[20]Ibid., Verbatim Transcript of the Twenty-Fourth Meeting, ENDC/PV.24, April 19, 1962, pp. 7-11.

[21]Ibid., pp. 11-15.

[22]Ibid., pp. 15-19.

[23]Ibid., pp. 38-44.

[24]Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the Ninth Meeting, ENDC/SC.1/PV.9, April 20, 1962, pp. 16-22.

[25]Ibid., p. 23.

[26]Ibid., Verbatim Transcript of the Tenth Meeting, ENDC/SC.1/PV.10, April 24, 1962, pp. 7-8.

[27]Ibid., pp. 13-18.

[28]Ibid., Verbatim Transcript of the Twelfth Meeting, ENDC/SC.1/PV.12, May 3, 1962, pp. 3-6.

[29]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Thirty-fourth Meeting, ENDC/PV.34, May 9, 1962, pp. 16-17.

[30]Ibid., pp. 19-22, 33-39.

[31]Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the

Thirteenth Meeting, ENDC/SC.1/PV.13, May 11, 1962, pp. 8-16.

[32] Ibid., Verbatim Transcript of the Fourteenth Meeting, ENDC/SC.1/PV.14.

[33] Ibid., pp. 12-15, 24.

[34] Ibid., Verbatim Transcript of the Eighteenth Meeting, ENDC/SC.1/PV.18, May 29, 1962, pp. 4-9.

[35] Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Fifty-seventh Meeting, ENDC/PV.57, July 16, 1962, pp. 12-13.

[36] Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the Twenty-First Meeting, ENDC/SC.1/PV.21, July 20, 1962, p. 27.

[37] Ibid., Verbatim Transcript of the Twenty-Second Meeting, ENDC/SC.1/PV.22, July 26, 1962, p. 21.

[38] Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Sixtieth Meeting, ENDC/PV.60, July 24, 1962, pp. 40-42.

[39] Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the Twenty-Second Meeting, op. cit., July 26, 1962, pp. 23-24.

[40] Ibid., pp. 32-33.

[41] Ibid., Verbatim Transcript of the Twenty-First Meeting, op. cit., pp. 5-8.

[42] Ibid., pp. 19.

[43] Ibid., Verbatim Transcript of the Twenty-Second Meeting, op. cit., pp. 4-5; and Verbatim Transcript of the Sixty-First Meeting, ENDC/PV.61, July 25, 1962, the Brazilian representative invited the conference to seek a ban on atmospheric and outer space tests, since the "divergencies" over the memorandum were largely confined to the detection and identification of underground explosions, p. 36.

[44] Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the

Twenty-Second Meeting, op. cit., July 26, 1962, pp. 26-28.

[45]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Sixtieth Meeting, op. cit., July 24, 1962, p. 23.

[46]Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the Twenty-first Meeting, op. cit., p. 17.

[47]Ibid., p. 26-27.

[48]Ibid., Verbatim Transcript of the Twenty-Second Meeting, op. cit., p. 11.

[49]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Sixty-First Meeting, op. cit., p. 37.

[50]Ibid., Verbatim Transcript of the Sixty-Third Meeting, ENDC/PV.63, July 30, 1962, p. 27.

[51]Ibid., Verbatim Transcript of the Sixty-Fourth Meeting, ENDC/PV.64, August 1, 1962, pp. 6-16.

[52]Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the Twenty-Third Meeting, ENDC/SC.1/PV.23, August 9, 1962, pp. 3-26.

[53]Ibid., pp. 47-56.

[54]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Sixty-Ninth Meeting, ENDC/PV.69, August 14, 1962, pp. 12-30.

[55]Ibid., pp. 45-57.

[56]Ibid., Verbatim Transcript of the Seventieth Meeting, ENDC/PV.70, August 15, 1962, pp. 46-47.

[57]Ibid., pp. 76-77.

[58]Ibid., Verbatim Transcript of the Seventy-First Meeting, ENDC/PV.71, August 17, 1962, pp. 36-47.

[59]Ibid., pp. 76-91.

[60]Ibid., Verbatim Transcript of the Seventy-Second Meeting, ENDC/PV.72, August 20, 1962, pp. 41-51.

[61] Ibid., Verbatim Transcript of the Seventy-Fifth Meeting, ENDC/PV.75, August 27, 1962, pp. 5-30.

[62] Ibid., pp. 61-66.

[63] Ibid., Verbatim Transcript of the Seventy-Sixth Meeting, ENDC/PV.76, August 29, 1962, pp. 17-17, 41-47.

[64] Ibid., pp. 81-87.

[65] Ibid., Verbatim Transcript of the Seventy-Seventh Meeting, ENDC/PV.77, August 31, 1962, pp. 41-46.

[66] Ibid., pp. 51-55.

[67] Ibid., Verbatim Transcript of the Seventy-Eighth Meeting, ENDC/PV.78, September 3, 1962, pp. 17-19.

[68] Ibid., p. 51.

[69] Ibid., p. 66.

[70] Ibid., Verbatim Transcript of the Eightieth Meeting, ENDC/PV.80, September 4, 1962, pp. 57-66.

[71] Ibid., Verbatim Transcript of the Eighty-First Meeting, ENDC/PV.81, September 5, 1962, p. 87.

[72] Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the Twenty-Fifth Meeting, ENDC/SC.1/PV.25, September 4, 1962, pp. 16-17, 67.

[73] Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Seventy-Seventh Meeting, op. cit., August 31, 1962, pp. 5-6.

[74] Ibid., pp. 7-8.

[75] Ibid., Verbatim Transcript of the Eighty-First Meeting, op. cit., pp. 5-10.

[76] Ibid., Verbatim Transcript of the Eighty-Third Meeting, ENDC/PV.83, November 26, 1962, pp. 5-15.

[77] Ibid., pp. 28-30.

[78] Ibid., Verbatim Transcript of the Eighty-Fourth Meeting, ENDC/PV.84, November 28, 1962, pp. 11-23.

[79] Ibid., pp. 31-32.

[80] Ibid., pp. 35-37.

[81] Ibid., Verbatim Transcript of the Eighty-Fifth Meeting, ENDC/PV.85, November 30, 1962, p. 14.

[82] Ibid., Verbatim Transcript of the Eighty-Sixth Meeting, ENDC/PV.86, December 3, 1962, p. 25.

[83] Ibid., pp. 15-21.

[84] Ibid., pp. 25-35.

[85] Ibid., pp. 45-49.

[86] Ibid., Verbatim Transcript of the Eighty-Seventh Meeting, ENDC/PV.87, December 5, 1962, pp. 4-14, 30-38.

[87] Ibid., Verbatim Transcript of the Eighty-Ninth Meeting, ENDC/PV.89, December 7, 1962, pp. 4-10.

[88] Ibid., Verbatim Transcript of the Ninetieth Meeting, ENDC/PV.90, December 10, 1962, pp. 13-15.

[89] Ibid., Verbatim Transcript of the Ninetieth Meeting, op. cit., pp. 27-28.

[90] Ibid., Verbatim Transcript of the Ninety-Fourth Meeting, ENDC/PV-94, December 19, 1962, pp. 13-23.

[91] Ibid., pp. 24-36.

[92] Ibid., Verbatim Transcript of the Ninety-Sixth Meeting, ENDC/PV.96, February 12, 1963, pp. 7-15.

[93] Ibid., pp. 21-22.

[94] Ibid., Verbatim Transcript of the Ninety-Ninth Meeting, ENDC/PV.99, February 18, 1963, p. 15.

[95] Ibid., Verbatim Transcript of the One-Hundredth Meeting, ENDC/PV.100, February 20, 1963, p. 10.

[96] Ibid., pp. 40-41.

[97] Ibid., pp. 5-10.

[98] Ibid., pp. 39-40. The controversy partly arose over statements made by the United Kingdom representative.

He said at a subcommittee meeting "We could have a complete comprehensive treaty and all that is necessary for that is for the Soviet Union to revert--not to accept anything new but to revert--to accepting something which a year ago, here in this building, our Soviet colleague renounced. In other words, to accept again the principle of obligatory on-site inspection. That is all we need--a very small number of on-site inspections a year. If that were conceded by the Soviet Union, if it were to revert to the position held until 28 November last year I believe we could quickly reach a comprehensive test ban." Conference of the Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests, Verbatim Transcript of the Forty-Fourth Meeting, ENDC/SC.1/PV.44, November 20, 1962, p. 11. He also said on 5 December 1962 in the plenary session, "But what I am saying is that if the Soviet Government were willing today to take the position that it took for two years until almost a year ago today, a comprehensive treaty could no doubt be signed by 1 January 1963." Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the Eighty-Seventh Meeting, op. cit., p. 5.

[99] Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the One Hundred and First Meeting, ENDC/PV.101, February 22, 1963, pp. 19-34.

[100] Ibid., pp. 41-46.

[101] Ibid., pp. 48-49.

[102] Ibid., Verbatim Transcript of the One Hundred and Second Meeting, ENDC/PV.102, February 25, 1963, p. 24.

[103] Ibid., Verbatim Transcript of the One Hundred and Third Meeting, February 27, 1963, pp. 23-24, ENDC/PV.103.

[104] Ibid., Verbatim Transcript of the One Hundred and Eighth Meeting, ENDC/PV.108, March 13, 1963, pp. 8-9.

[105] Ibid., Verbatim Transcript of the One Hundred and Fourth Meeting, March 1, 1963, ENDC/PV.104, pp. 15-21.

[106] Ibid., pp. 38-41.

[107] Ibid., Verbatim Transcript of the One Hundred and Fifth Meeting, ENDC/PV.105, March 6, 1963, pp. 18-26.

[108] Ibid., p. 42.

[109] Ibid., Verbatim Transcript of the One Hundred and Ninth Meeting, ENDC/PV.109, March 15, 1963, pp. 9-24.

[110] Ibid., pp. 24-35.

[111] Ibid., pp. 37-38.

[112] Ibid., Verbatim Transcript of the One Hundred and Sixteenth Meeting, ENDC/PV.116, April 1, 1963, pp. 10-16.

[113] Ibid., pp. 16-21.

[114] Ibid., Verbatim Transcript of the One Hundred and Nineteenth Meeting, ENDC/PV.119, April 8, 1963, pp. 17-20.

[115] Ibid., pp. 20-26.

[116] Ibid., Verbatim Transcript of the One Hundred and Twenty-Sixth Meeting, ENDC/PV.126, April 29, 1963, p. 26.

[117] Ibid., Verbatim Transcript of the One Hundred and Thirty-First Meeting, ENDC/PV.131, May 13, 1963, pp. 13-18.

[118] Ibid., Verbatim Transcript of the One Hundred and Forty-Fifth Meeting, ENDC/PV.145, June 17, 1963, pp. 14-16.

[119] Ibid., Verbatim Transcript of the One Hundred and Forty-Second Meeting, ENDC/PV.142, June 10, 1963, pp. 6-9.

[120] President Kennedy, "Toward A Strategy of Peace," The Department of State Bulletin, Vol. XLIX (July 1, 1963), pp. 5-6.

[121] Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the One Hundred and Forty-Third Meeting, ENDC/PV.143, p. 4.

[122] Ibid., pp. 11-14.

[123] Ibid., Verbatim Transcript of the One Hundred and Forty-Fourth Meeting, ENDC/PV.144, June 14, 1963, p. 8.

[124] Ibid., Verbatim Transcript of the One Hundred and Forty-Seventh Meeting, ENDC/PV.147, June 21, 1963, p. 17.

[125] *Ibid.*, pp. 29-31.

[126] *Ibid.*, p. 43.

[127] *Ibid.*, p. 44.

CHAPTER V

UNITED STATES AND SOVIET UNION NUCLEAR WEAPONS TEST BAN POSITION 1 JULY 1963

Introduction

The position of the United States and the Soviet Union as of 1 July 1963 in reference to the nuclear weapons test ban agreement has undergone extensive change from the original positions they put forth in the earlier part of the negotiations when they began in 1958. These positions have evolved from the negotiations, increased scientific and technological knowledge, and the changing international situation.

For purposes of analysis, the positions can best be reviewed if taken in three but interrelated elements. First, the position in reference to atmospheric, outer space and underwater tests; second in reference to underground tests; and third, in reference to the verification system.

The United States Position

Atmospheric, outer space and underwater tests. The United States position on a test ban on atmospheric, outer space and underwater tests is basically that national systems of detection and identification are adequate for

CHAPTER V

UNITED STATES AND SOVIET UNION POLICIES
REGARDING OUTER SPACE PROPULSION
1 JULY 1960

Introduction

The positions of the United States and the Soviet Union as of 1 July 1960 in reference to the earlier measures that had already been undertaken unfairly change from the original positions they had held in the earlier part of the Sputniks-era when they began in 1958. These policiions have evolved from six Sputniks, increased scientific and technological knowledge, and the changing international situation.

For purposes of analysis, the positions can best be reviewed if taken in three but interrelated elements. First, the position in reference to astrophysics, outer space and interplanetary travel, second in reference to weapon-based anti-satellite, in reference to the satellite system.

The United States Position

Astrophysics, outer space and interplanetary travel. The United States position on a test ban on astrophysics, outer space and interplanetary travel is basically that national systems of detection and identification are adequate for

the detection of explosions in these environments. This current position has evolved from a comprehensive system of extensive control posts, on-site inspections and aircraft sampling flights. The main reason for the evolution of this position to reliance on national systems was the increase in technological knowledge, particularly in the field of long-range seismology, satellites, and instrumentation. This is particularly true because explosions in these environments, with the possible exception of extreme outer-space, evidence of them cannot be confined to the limits of any particular country. The possibility of non-detection in extreme outer space is also very small because of the increased capability of launching satellites and in instrumentation which both nuclear sides possess.

The specific elements of the United States national detection system have not been made public and remain classified, but Senator Humphrey indicated in a speech he made in the Senate on March 7, 1963, "the fact is that our detection capability is much greater than the press has led us to believe on the basis of the information it has received from the United States government."[1] Senator Clark also stated that

> as the art has progressed, our country has constructed additional stations and has trained additional men in the art, so that as of today . . . it is almost universally admitted that tests in the atmosphere and those under water and those in

the deterioration of regulations in their environments. This concern partially has evolved from a correspondently system of automatic control posts, on-site inspections and air-craft monitoring flights. The main reason for the existence of this position to relinquish an military systems was the increase in technological knowledge, particularly in the field of long-range aeronautics, satellites, and instrumentation. This is particularly true because nations in their environments, with the possible exception of extra-atmosphere, either of them cannot be controlled by the limits of any particular country. The possibility of non-cooperation in future outer space is also very small because of the increased capability of inspectory satellites and in instrumentations which both nations also possess.

The specific elements of the Soviet Union radiance defensive system have not been made public but remain classified. Yet another Temporary Initiative is a speech so made in the Danube on March 7, 1967. The fact is that our detection capability is much greater than the years has led us to believe on the basis of the information it has received from the United States government.[4] Davison Clark also states that

> as the art has progressed, the capacity for con-
> structed military stations and the related soli-
> tional man in the art, so that as of today . . .
> it is almost universally admitted that basis in
> the atmosphere and those under water and those in

> outer space can be detected without establishing within the Soviet Union any stations or means of control.[2]

It was on the basis of this capability to detect and identify nuclear explosions in the atmosphere, under water and outer space that prompted the United States to propose on April 13, 1959, the phased treaty concept. The proposal recognized the agreement over detecting explosions in the three elements while negotiations continued toward reaching settlement in the other area--underground testing.

The latest proposal was submitted by the United States and the United Kingdom jointly on August 27, 1962, as an alternative treaty if a comprehensive test ban treaty could not be agreed upon. This proposal covered the banning of all tests in the atmosphere, outer space and under water without international control, and each side would rely on their own national detection and identification systems to police the ban. However, the United States position remained that it would not accept a moratorium on underground testing in conjunction with the partial or limited test ban, a position it has held since September 1961 when the Soviet Union broke the three year moratorium on testing.

Thus the latest United States position on banning tests in the atmosphere, outer space, and underwater would

ban nuclear weapon tests in or above the atmosphere and in territorial waters or high seas; bind the signatories to refrain from encouraging or participating in such nuclear explosions by any other State; permit explosions prescribed in the treaty for peaceful purposes under conditions specified in the treaty; not require any international verification machinery; provide a cut-off date for testing; and, contain provision for withdrawal, after notice had been given, if a party deemed the treaty had been violated or that a State not a party to the treaty had tested and if the party also deemed this jeopardized its national security.

Underground tests. The real area of disagreement and difference in position has revolved around the issue of detection and identification of underground tests. The basic United States position has remained fundamentally the same since the negotiations began. That is, namely, that no technical means is presently available that will distinguish positively, in all cases, between a nuclear explosion and an earthquake. Therefore, there will always be a certain number of unidentified events that can only be positively identified by on-site inspection at the source of the event.

Technological progress has succeeded in lowering the number of unidentified events but not of identifying

them all. The problem is one of detection because it is conceived that national systems have the capability of detecting events but not of identifying them.

Because of this basic principle, a certain amount of control is necessary to police this aspect of a comprehensive ban. The United States position thus is that as long as there is no technical means or method to identify positively an event as an earthquake or explosion then the only method of determining whether an event was an earthquake or explosion is by on-site inspection. Further, the position has remained that the number of inspections must be correlated to the number of unidentified events in order to act as a positive deterrent against cheating.

Additionally, decoupling and dampening techniques of muffling the explosion by various methods have been put forward by the United States to demonstrate a means of increasing the size of the explosion but decreasing the signal strength thus increasing the military value of the explosion and complicating detection and identification. Therefore, because of the technological problems and the military value of underground tests, a comprehensive test ban in all elements requires a much greater verification system than that considered necessary for a limited or partial ban in the other three environments.

Verification system. Because of the technical

problems of distinguishing between earthquakes and nuclear explosions of small yield used in underground testing, the United States has always put forth the position that effective control requires a verification system that will remove most elements of doubt and provide reasonable assurance against cheating.

The latest position has evolved through the course of the negotiations and improvements in technological knowledge and instrumentation. The system proposed is built around the nucleus of national manned and operated detection stations. To supplement this system, a number of automatic seismic stations would be established in each of the nuclear countries to increase the capabilities of the national systems and to supplement the information furnished by the national detection systems. To verify those events that cannot be identified as earthquakes the system calls for a yearly quota of on-site inspections. Thus, the United States position on the verification system is one of national detection stations, automatic seismic stations and on-site inspection.

Additionally, an international scientific commission is proposed that would operate as a clearinghouse for data received from national systems and automatic stations which would be passed from one side to the other. This commission would be assisted by a small staff that would aid the

commission in the collection of data from the automatic stations, deliver, place and pickup the sealed equipment at the automatic stations, and maintain and calibrate the equipment in conjunction with the Nuclear Powers.

The position on inspections is that once an event has been detected and which, after the application of certain prescribed criteria cannot be identified as an earthquake, the other Nuclear Powers concerned can call for on-site inspections at the location of the event to determine whether it was an earthquake or nuclear explosion. The inspection teams would be made up, in the case of an inspection in the Soviet Union, of fourteen United States or United Kingdom technicians plus fourteen representatives of the international commission so long as they are not nationals of the NATO or Warsaw Pact countries. The number of inspections which the United States considers necessary in relation to the estimated number of unidentified events that will occur within the Soviet Union each year is seven, provided that national seismic stations and automatic seismic stations are properly equipped and located.

The system is built upon the premise that there should be an agreed sequence and orderly procedure for the carrying out of an on-site inspection. This procedure, as envisaged by the United States, would work as follows:

First, an event would be detected by national

seismic stations, this data would be analyzed and discussed by officials of the national system and would also be transmitted to the international commission and to the other side.

Second, a State would have sixty days from the time of the seismic event to designate the event as subject to on-site inspection.

Third, the procedure involved to request inspection would be:

(a) The designating side would send a statement to the commission and through it to the country in which the event took place. This statement would indicate the location of the event and time of its occurrence.

(b) The designating side would then forward data from at least four seismic stations by which the event was located. This data would have to provide for location when seismic signals whose frequencies, amplitudes, durations and velocities are consistent with those of waves from earthquakes or explosions are recorded at a sufficient number of stations to establish the approximate time and position of the event. Requires a minimum of four stations.

(c) The designating country must declare that the event located is not an identifiable earthquake on the basis of the following criteria:

(1) its depth of focus is not established as below sixty kilometers;

(2) its epicentral location is not established to be in the deep open ocean.

(3) it is not established to be a foreshock of a seismic event of at least magnitude six which has been clearly identified as an earthquake.

(4) it is not established to be an aftershock of a seismic event of at least magnitude six which has been clearly identified as an earthquake.[3]

(d) The State on whose territory the event took place should have one week to provide all supplementary information which it had and wished to make available about the event. This information would be given to the commission and through it to the designating State.

(e) During this week for furnishing supplemental information, the designating State would have the opportunity to examine the data collected by the automatic seismic stations in the country where the event occurred. The retrieval should be accomplished by personnel from the designating State and the international commission.

(f) The designating side should be given an additional week to analyze the data from the country concerned and the automatic seismic stations.

(g) Before the lapse of this additional week,

the designating State would have to submit another statement requesting on-site inspection. If the period lapses without requesting inspection, the event would no longer be eligible for inspection. This statement requesting on-site inspection should include information on the location and boundaries of the area selected for inspection. The area would be a maximum of 300 square kilometers. Further, the statement must include the proposed time and place of the arrival of the inspection team.

(h) The host State would have five days from the date of the request for on-site inspection to indicate arrangements for reception and transportation of the inspection team to the inspection site. Also, during this time, the host State can file a report with the Commission indicating the presence of a sensitive defense installation in the inspection area. The designating State could then continue the inspection excluding the sensitive area or cancel the inspection and retain the quota number for future use.

Fourth, the inspection process. The inspection team would consist of twenty-eight members, fourteen of them from the nuclear side opposite the one being inspected. The other members of the team would be selected by the commission from the non-aligned countries. The host State can send observers with the inspection team and can

institute any safeguards it considers necessary for its national security. However, these safeguards cannot interfere with the timely arrival of the team at the inspection site. The team would normally include specially trained scientists and technicians. All the equipment for the team would be furnished by the team except for heavy transportation equipment; such as, trucks and helicopters. The inspection team would have a maximum of six weeks to complete their examination of the inspection area. The time could be extended by mutual agreement. The physical inspection would include low level helicopter flights for visual and photographic survey, access and inspection to any sub-cavities and drilling, if necessary, but this must be requested within five weeks from the start of the inspection. The team leader must submit a report on the findings of the inspection to all concerned not later than thirty days after completion of the inspection.[4]

Summary. Thus the United States position in reference to a comprehensive test ban covering all four elements--atmosphere, outer space, underwater and underground--would consist of a treaty banning all tests in any environment and a verification system consisting of national detection and identification system, an international commission, automatic seismic stations and a quota system of on-site inspections.

limitations and safeguards it considers necessary for its national security. Thereby, there exists reciprocal commercial trade with the steady arrival of the team at the Incorporation area. The team could normally include physicists, scientists and technicians. All the equipment for the team would be provided by the team except for heavy transportation equipment such as, trucks and helicopters. The Incorporation Zone would have a maximum of six years in complete joint exploitation of the Incorporation area. The time could be extended by mutual agreement. The initial Incorporation would include the Lunar Nationalist Eligible for visual and photographic survey, intern and interpretation by non-scientists and military, if necessary, but this must be completed within five weeks from the start of the expedition. The team leader must submit a report on the findings of the Incorporation in all languages not later than twenty days after conclusion of the Incorporation.

Summary. That the United States position in rendezvous in a cooperative test has been covering all that elements—civilian, under space, inter-lunar and international—would consist of a basic meeting all tests in my motion—base and a verification system consisting of national detection and identification system, an international commission, automatic seismic stations and a truth system of on-site inspection.

The national stations would be located, equipped, operated and supervised by the nuclear side concerned.

The international commission would be composed of fifteen members, four from the West, four from the Soviet bloc, and seven from the non-aligned countries. The primary duties of the commission would be: to act as a clearinghouse for data received from the national systems and the automatic seismic stations and pass this data from one side to the other; assist in the automatic seismic station delivery, placement and pickup of the sealed equipment furnished by the Nuclear Powers; and to furnish assistance for the inspection process.

The United States proposes seven automatic seismic stations to be located within each nuclear country. The location of the sites to be mutually agreed upon. Equipment for these stations would be furnished by the nuclear countries and would be picked up and delivered a maximum of eight times yearly by representatives of the nuclear side concerned and representatives of the international commission. The purpose of these stations is to add to the capabilities of the national systems and to supplement the information furnished by the national systems to the commission and to the other side.

The acceptance of obligatory on-site inspection remains the keystone of the United States verification

system. They presently propose a quota of seven inspections in the nuclear countries per year provided that national stations and automatic stations are properly located and equipped.

Although the United States has indicated that it wants a comprehensive test ban treaty, five years of negotiations have failed to overcome the disagreement over the verification system. Therefore, the United States has also indicated that it would accept an alternative limited test ban treaty banning tests in the atmosphere, outer space, and underwater without any international control organization or on-site inspection and would rely on national systems for detection and policing the ban in these elements. However, the United States position has remained that it will not accept a moratorium on testing in the other element, underground testing, in conjunction with a treaty banning tests in the other three elements.

The Position of the Soviet Union

Atmospheric, outer space and underwater tests. The Soviet Union has long contended during the course of the negotiations that national detection and identification systems were adequate for the policing of a ban on testing in the atmosphere, outer space and underwater. Their position remains that international control is not necessary for the detection of explosions in these elements. However,

system. They necessarily possess a stock of nuclear weapons in the nuclear countries and year provided that national strategies and nationally particular ends generally thought and analysed.

Although the United States has maintained that it made a considerable lead has been lately, five years of supplies have failed to preserve the discovery over the multilateral system. Therefore, the Pakistan review the also indicates that it would consider as alternative limited task has clearly leading years in the economy, more space, and nuclearness without and independent control separations in non-this independence and would rely on national system for activities and politics the [illegible] these elements. Thereby, the United States position has remained that it will not supply a contribution in leading in the other elements, nonproposed leading, in proliferation with a lately nuclear [illegible] in the other three elements.

The Position of the Soviet Union

Theoretically, Soviet Union has a nuclear field. The Soviet Union has long contended during the Theory of the negotiations that nuclear deterrent and identification systems were adequate for the building of a bon ne leading in the economy, other areas and nationalities. This position remains that international control is not necessary for the distribution of capitalism in these elements. However,

they have not been willing to accept a limited ban on testing in the atmosphere, outer space and underwater without a moratorium on testing in the other element, underground, while negotiations continue toward reaching an acceptable solution in this area.

Underground tests. The Soviet position in regards to underground tests is that national systems have the capability of detecting and identifying events in this element also. However, they have not furnished any scientific proof as requested by the Western Powers and have agreed to a limited number of automatic seismic stations and a small quota of on-site inspections. Their position remains that they will accept three automatic seismic stations on their soil and will allow the Western Powers up to three on-site inspections yearly. Their continued position is that these are not necessary but are put forward in an effort to reach agreement as a concession to the West. They have also stated that because they are a concession to the desires of the West they are firm and not negotiable.

Verification system. The latest Soviet position in reference to a verification system remains unclear because of the Soviet insistence that the West must accept their numerical number of automatic seismic stations and their proposed quota for on-site inspections before they will

they have not been willing to accept a limited ban on testing in the atmosphere, outer space and underwater without a moratorium on testing in the other elements, unrestricted, with negotiations continue toward creating an acceptable solution in this area.

Intergovernmental basis. The Soviet position in regards to multilateral tests is that nuclear systems deny the capability of detecting and identifying events in this element alone. However, they have not precluded any solution which could be supported by the western lowers and been agreed to a limited number of acceptable methods combined and a small quota of acceptable inspections. Their position remains that they will accept fixed monitoring stations on their soil and will allow the western powers up to four on-site inspections yearly. Their conditioned position in that these were not necessarily but are yet desirable in an effort to reach agreement as a compromise to the tests. They have also stated that because they are a consequence to the decline of the arms they are true and not acceptable.

Verification system. The latest Soviet position is reference to a verification system remains unclear because of the foreign inspections but the Soviet must accept their numerical number of acceptable seismic stations and their proposed quota for on-site inspections before they will

discuss the technical details of a verification system. They have accepted the eight nation proposal for an international scientific commission but have refused to spell out any details in reference to it. However, a review of the past negotiations indicates that there would be very few areas of disagreement with the latest Western proposals for a verification system.

Summary. Thus the Soviet position in reference to a nuclear weapons test ban is the use of national detection systems; acceptance of a small scientific commission whose duties and functions they have not defined; acceptance of three automatic seismic stations in the Soviet Union; and, the acceptance of three on-site inspections per year. In regards to a limited test ban, they have refused to accept a treaty banning tests in the atmosphere, outer space and underwater without a moratorium on testing underground while negotiations continue on a comprehensive agreement.

Comparison of the Positions

A comparison of the two positions reveals that they both accept national detection and identification systems, automatic seismic stations to supplement national systems, a limited international commission, and on-site inspections.

The difference lies in the technical and political aspects of the problem of control.

The United States position is based on the minimum acceptable amount of control, based on the latest scientific and technical data, to ensure effective control and to act as a deterrent against cheating. Therefore, their position requires, based on the latest scientific evaluation, seven automatic seismic stations within each nuclear country and seven on-site inspections per year.

The Soviet position, on the other hand, is based on strictly political considerations, whereby she concedes to the Western Powers three automatic seismic stations in each nuclear country and a maximum of three on-site inspections per year as a political concession to facilitate agreement. The basic position the Soviet Union continues to argue is that inspection is not scientifically necessary and the path to agreement lies only in reaching a strictly political solution to the differences.

Thus, on the surface, the positions appear to be similar but underneath there remains differences in principle.

CHAPTER V - FOOTNOTES

[1]Hubert H. Humphrey, "A Nuclear Test Ban and National Security," Congressional Record, Proceedings and debates of the 88th Congress, First Session, March 7, 1963, p. 6.

[2]Ibid., p. 4.

[3]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the One Hundred and Tenth Meeting, March 18, 1963, p. 20. The United States representative remarked that the United States would accept the temporary criteria agreed to at the Conference for the Discontinuance of Nuclear Weapons Tests.

[4]Conference of the Eighteen-Nation Committee on Disarmament, Verbatim Transcript of the One Hundred and Tenth Meeting, op. cit., pp. 19-26; and Verbatim Transcript of the One Hundred and Thirteenth Meeting, ENDC/PV. 113, March 25, 1963, pp. 5-9. The United States representative outlined in detail the technical details of the inspection procedures as envisaged by the United States.

[illegible] X — [illegible]

[illegible] R. Sawyer, "A Review [illegible] Bi-[illegible] Security," [illegible] Choice of the [illegible], [illegible] March 7, 1973, p. 8.

[illegible], p. 4.

[illegible] of the [illegible] Conditions in [illegible], [illegible] of the [illegible] and [illegible] Desires, March [illegible], [illegible] [illegible] [illegible]

CHAPTER VI

MUTUAL ADVANTAGES FOR DISCONTINUANCE OF NUCLEAR WEAPONS TESTING

I. INTRODUCTION

Why have the nuclear weapons test ban negotiations been going on for five years? The history of the negotiations has been one of moving from one deadlock to another but somehow they get going again and the differences separating the two sides from agreement becomes less and less, until they have reached the point where the separation is a matter of numbers. For major powers to spend the time and expense to continue these negotiations, there must be advantages that are mutually acceptable to both sides even though each is not willing to take the extra small step to bring about final agreement.

There are four basic reasons why these negotiations are so important to both sides. First, for humanitarian reason to rid the atmosphere of the scourge of radioactive fallout and its unknown effects on the human race. Second, the reaching of agreement is viewed as one means of slowing down the arms race, particularly in the field of nuclear weapons. Third, there is a better chance for agreement in this area than any other area in relation to arms control and disarmament issues and, therefore, it is

considered as a first step in that direction. Fourth, reaching agreement on a test ban can stop the proliferation of nuclear weapons to countries that do not now hold them.

Each of the above arguments has advantages to both sides; however, there are opposing arguments that have kept the Nuclear Powers from reaching agreement. These arguments revolve around the concept of how much would this agreement affect the national security of the country concerned as opposed to the benefits to be derived if agreement is reached.

The question can also be asked whether the arguments that have been expounded above for the continuation of negotiations would be valid if agreement was reached on the basis of the latest positions outlined in the previous chapter.

II. HUMANITARIAN READERS

One of the main arguments put forth not only by the Nuclear Powers but by the Non-nuclear Powers is that nuclear weapons testing must be halted to stop the pollution of the atmosphere. This argument has been the chief plank of the platform of the eight non-aligned members of the Eighteen-Nation Committee. Similarly, it has been the basis for most of the United Nations resolutions on

considered as a little more in-depth discussion. Thus, existing agreement on a basis has not stop the multilateralism or nuclear weapons to countries that do not own them.

Both of the above arguments are inadequate to solve either however. Based on operation agreements that have had the nuclear Powers from proliferation operations. Some agreements actually around the problem of the most serious this agreement affect the national security of the nuclear countries as opposed to the security to be derived in agreement to problem.

The question can also be asked whether the argument that have been considered since the multilateralism of negotiations would be valid if agreement was reached on the basis of the latest positions outlined in the previous chapter.

The Nonproliferation Agreement

One of the main arguments put forth not only by the nuclear Powers but by the non-nuclear Powers is that nuclear weapons control may be helped to stop the proliferation of the nuclear. This argument was been the major plank of the platform of the eight nonaligned members of the Disarmament Committee. Basically, it has been the basis for most of the United Nations resolutions on

the subject of nuclear weapons testing. There is a difference of opinion in the scientific field about the effects on the human race caused by nuclear testing.

The Committee on the Genetic Effects of Atomic Radiation of the United States National Research Council - National Academy of Sciences said in their report

> any radiation is genetically undesirable, since any radiation induces harmful mutations. Further, all presently available scientific information leads to the conclusion that the genetic harm is proportional to the total dosage.[1]

Dr. Linus Pauling estimates that testing at the 1958 testing rate of ten megatons fission per year will lead to an increase of 1 per cent in the number of defective births. This, he said, will amount to 15,000 seriously defective children who will be born each year whose defect can be attributed to the bomb tests.

In conclusion, Dr. Pauling says on the subject that

> perhaps the estimate that bomb testing at the present rate is producing a one percent increase in mutation rate is wrong. There is a possibility that it is ten times too large. Also there is a possibility (because our knowledge is incomplete) that it is ten times too small. [He continued,] the geneticists are sure that no one can claim that the genetic effect does not exist. We must all accept the fact that the testing of nuclear weapons is carried out at the expense of the lives of children as yet unborn.[2]

Dr. Pauling's arguments against nuclear testing for humanitarian reasons are typical of the scientists that believe that any increase in radiation in the atmosphere is a crime against humanity.

Dr. Teller is typical of the opposite school of scientists that believe that the amount of radiation added to the atmosphere is so minute that it is negligible and is far less of a factor than the normal changes in radiation levels caused by natural means. Dr. Teller says:

> There is no reason why a scientist or an informed layman should consider radiation a mystery. Our scientific knowledge about radiation is firm and detailed in many ways. We know for example, that all types of radiation produce reactions in the human body that are almost alike. We know the levels at which radiation becomes a danger to humans, and we can predict the effects of certain kinds of radiation at certain levels with considerable precision. We have clear evidence that present levels of radiation in our atmosphere from natural sources and from radioactive fallout of nuclear tests are, at best completely safe for humans or, at worst, are causing exceedingly little damage.

He continued,

> compared to massive doses of radiation that can cause illness or even death, radiation from world-wide test fallout is exceedingly small. The bones of human throughout the world today are getting an average of about 0.002 roentgens a year from Strontium 90 in the fallout. The rest of the body is being exposed to about the same amount of radioactivity, mostly from the fallout's Cesium 137. In certain areas there is a greater accumulation of fallout, but it would be difficult to imagine that anyone in the world could receive a lifetime dose of more than four or five roentgens of radiation from fallout. This still is less than the radiation received from cosmic rays alone . . . . People living at sea level in the United States are exposed to 0.034 roentgens of radiation from cosmic rays each year. This is seventeen times the amount obtained from the Strontium 90 in the world-wide fallout. Exposure to cosmic rays in Denver, about 5000 feet above sea level, is 0.05 roentgens a year. If such small doses of radiation really were dangerous, we had better evacuate Denver.

Dr. Teller concludes,

> If we consider radioactive fallout objectively rather than emotionally, we know that it is not as dangerous as living in Denver rather than San Francisco, that it is not likely to induce cancer as smoking a pack of cigarettes a day, that it is not as likely to give rise to some harmful effects as are many unsuspected chemicals in the food we eat or in the air we breathe, that it is not as apt to produce mutations as wearing trousers. It is, in other words, not worth worrying about.[3]

Regardless whether Dr. Pauling or Dr. Teller is right, the fact remains that the question of radioactive pollution of the atmosphere by nuclear tests has been very instrumental in keeping the negotiations going by the Nuclear Powers in an effort to reach an agreement on banning tests.

III. SLOW DOWN THE ARMS RACE

Another factor that has been put forth by both sides during the course of the negotiations and by statements of officials of both sides is that a nuclear weapons test ban would slow down the arms race.

The argument goes something like this, that by putting a ban on the testing of nuclear weapons you slow down the arms race because: you stop the further sophistication of present nuclear weapons; decrease the chances of a major breakthrough by one side which would upset the military balance; and, reduce the chances of accidental or pre-emptive attack.

Both sides have stated that the increase in the arms race, which has shifted from quantitative to qualitative development of armament systems, would eventually lead to a nuclear exchange between the two sides by either accidental or other reasons.

Secretary of Defense MacNamara aptly described what the eventual outcome of the arms race would be if it was not halted when he said, "As the arms race continues and the weapons multiply and become more swift and deadly the possibility of a global catastrophe, either by miscalculation or design, becomes ever more real."

Thus this argument because of the mutual devastating consequences of a nuclear exchange which will be brought about if the arms race continues, has been instrumental in keeping the negotiations going. Further, it has been a chief argument of the Soviet Union for not accepting a partial or limited ban on testing in the atmosphere, outer space and underwater without a moratorium on underground testing because they claim it will not slow down the arms race but could, in fact, speed it up.

IV. SMALL STEP FORWARD

Another chief argument for the continuation of negotiations for agreement on a nuclear weapons test ban is that because of its mutual advantages, it holds out the

such sides have reason that the increase in the area rate, which the shifted from quantitative to qualitative development of economic systems, could eventually lead to a nuclear exchange between the two sides by either accidental or other reasons.

Necessary to believe Gaddis's highly-detailed and the rational motives of the area rate when it is not not lasted when in vain. As the area rate continues and the weapons multiply and become more rapid and deadly the possibility of a global annihilation, either by miscalculation or design, becomes ever more real.

Thus this argument because of the nuclear development management of a nuclear military action will be brought about if the arms race continues, has been instrumental in bringing the superpowers closer. However, it has been a mutual agreement of the Soviet Union the not accepting a partial or limited one to nothing in the armament, also space and nuclear-free without a accomplishing or international testing because they claim to will not also some the arms race but could, in fact, speed it up.

IV. THE ARMS RACE

Another chief argument for the proliferation of nuclear-armed the appropriate as a nuclear weapon that can be used because of its great advantage. In order for the

promise of being an area where agreement can be reached and will lead to bigger and more comprehensive arms control and disarmament agreements.

Both the Western Powers and the Soviet Union have moved throughout the course of the disarmament negotiations that have been held since 1945 from searching for partial smallstep agreements to comprehensive all inclusive phased general and complete disarmament schemes. The United States finally agreed to treat the test ban as a separate and distinct issue separate from a broad disarmament agreement in 1959, accepting the view held by the Soviet Union at that time. However, in 1961, the Soviet Union again linked the test ban issue with the comprehensive general and complete disarmament issues as the only way to make progress in the field where control could be accepted in relation to its effect on the national security interests of the Soviet Union. They also gave for its reason for a shift back to the comprehensive general and complete disarmament approach the reason that the United States had not fully accepted the small step principle. They contended that the United States was demanding a control system that could be used as a model for later disarmament agreements and this was out of context with the amount of disarmament involved in an agreement on a nuclear weapons

test ban, which they argued was not disarmament and, therefore, required little or no control.

There are arguments for and against this small step principle, but it cannot be denied that this search for a position on which agreement can be reached has had an active part in keeping the negotiations going.

V. PROLIFERATION OF NUCLEAR WEAPONS

One of the major arguments that the United States has used to support its position to continue negotiations and to continue to search for agreement is the belief that a test ban agreement would stop the proliferation of nuclear weapons. The proliferation of nuclear weapons to other countries that can develop the capacity and the desire to possess them can constitute a threat to the national security of the United States and the Soviet Union.

The statement has been repeatedly made that the time is rapidly running out that if agreement is not reached it will be too late to stem the distribution of the weapons throughout the world. This would increase the chances of a nuclear war which would have devastating effects on countries as well as the course of history.

The present state of the art of development of nuclear weapons makes their development and the building of

that time, which they agreed was not DISARMAMENT and, therefore, required little or no monitoring.

There are numerous precedent regarding this small area principle, but it cannot be denied that this issue is a sensitive one which increased and be resolved but that an active part in shaping the negotiations policy.

V. VERIFICATION IN SOVIET DOCTRINE

One of the major arguments that the United States has used to support its position in negotiations regarding and its emphasis on ensuring the adequacy of its initial data a base for increased verification. The VERIFICATION of modern weapons , the VERIFICATION of nuclear weapons or other weapons of mass destruction has become key and increasing to prevent them from constitute a threat to the national security of the United States and the rest of the world.

The statement has been consistently made that the USSR is equally concerned and that if agreement is ever reached it will be necessary to solve the verification and implementation problems the world. This would necessitate the adoption of a position not unlike that which Soviet leaders initially adopted before the end of the decade of the 1960s.

The problems raised by the use of sophisticated or nuclear weapons were well recognized and the building of

delivery systems very costly. However, many contend that with increased experimentation and testing a pure fusion bomb can be developed which would be easier and cheaper to make and would be within the reach of any country to manufacture and deploy for military use.

However, if a test ban agreement is reached, while not all countries are expected to adhere to it, at least it would limit the number of countries that could join the nuclear club and make control of these weapons much easier to accomplish than otherwise would be possible. Further, if the major Nuclear Powers did reach an agreement, the weight of world opinion would have a dampening effect on those countries that did continue to refuse to adhere to the treaty.

VI. SUMMARY

Thus, there are four major reasons why the Nuclear Powers have continued negotiations in an attempt to reach a nuclear weapons test ban agreement. That is, for humanitarian reasons, to slow down the arms race, to search for a first step agreement, and to stop the proliferation of nuclear weapons. These arguments have been instrumental in keeping the negotiations going for nine years however, they have not been strong enough for the Nuclear Powers to reach agreement.

military systems very nearly. However, many contract plans with increased expenditures and testing a pure Navigo [illegible] could be developed which would be stable and cheaper to make and would be utilized [illegible] by [illegible] [illegible] [illegible] and military [illegible].

However, if a [illegible] is necessary, with [illegible] all conditions are required to adjust to it, at least it would [illegible] the number of [illegible] that [illegible] [illegible] [illegible]

CHAPTER VI - FOOTNOTES

[1]Linus Pauling, No More War (New York: Dodd, Mead and Company, 1958), p. 59.

[2]Ibid., pp. 49-76.

[3]Edward Teller, The Legacy of Hiroshima (Garden City, New York: Doubleday and Company, 1962), pp. 167-183.

[4]United States Congress, Senate, Committee on Armed Services, Military Procurement Authorization Fiscal Year 1964, Hearings, 88th Congress, First Session (Washington: Government Printing Office, 1963), p. 36.

CHAPTER VII

SUMMARY AND CONCLUSIONS

I. SUMMARY

The course of this investigation has been through the maze of the negotiations on a nuclear weapons test ban out of which evolved the latest positions of the Nuclear Powers. The reasons why these negotiations continued, when at times in the negotiations it looked like they had reached the same impasse that plagued all previous conferences in the disarmament field, were also looked into. All this was directed towards an attempt to reach some conclusions in reference to the title of this paper, "To Test or Not to Test." This was qualified in the introduction to mean, what is the course of these negotiations, will they go the way of all other disarmament negotiations, or is the mutual advantages strong enough to bring about agreement? A further question that must be answered is will an agreement bring about the conclusions that have been continuously put forward for continuing the negotiations in the light of the final positions of the United States and the Soviet Union?

The negotiations had their beginning with the Conference of Experts from July 1 to August 21, 1958. It was truly a technical conference on the surface, but it also did cover some political areas which led to disagreements

CHAPTER VIII

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1. SUMMARY

The course of this investigation has been through the maze of the negotiations as a neutral observer saw it out of which emerged the latest positions of the Western Powers. The records only these negotiations continued, when at times in the negotiations it looked like they had reached the same impasse that plagued all previous conferences in the disarmament field, more also looked into. All this was directed towards an attempt to reach some conclusions in reference to the title of this paper, "To Test or Not to Test." This was qualified in the introduction to mean, what is the course of these negotiations, will they go the way of all other disarmament negotiations, or is the market situation strong enough to bring about agreement? A further question that must be answered is will an agreement bring about the conditions that have been unanimously put forward for establishing the negotiations in the light of the final positions of the United States and the Soviet Union.

The negotiations had their beginning with the conference of experts from July 1 to August 21, 1958. It was truly a technical conference on the matter, but it also did have some political areas which led to disagreements

at the later political conference. On the basis of the successful conclusion of the Conference of Experts that it was technically feasible to police a nuclear weapons test ban within certain capabilities and limitations, a political conference was convened to wrap up the final agreement.

The political conference, called the Conference on the Discontinuance of Nuclear Weapon Tests, met from October 31, 1958, to January 29, 1962, and failed to reach agreement because of the basic differences of opinion over the element of effective control. The negotiations managed to continue with the convening of the Eighteen-Nation Committee on Disarmament on March 14, 1962, and they have continued as a part of this conference until the Conference recessed on June 21, 1963. This marked the end of the period of investigation for this paper but not the end of the negotiations.

Out of these negotiations evolved a United States position that would ban tests in all environments and effective control would rest on a national detection system, automatic seismic stations, an international scientific commission and obligatory on-site inspection.

The Soviet Union's position as it evolved was for banning all nuclear weapon tests in all environments and the control system they advocated would include a national

as the latter political conference, on the basis of the announced unanimity of the conference of Cuyama that it was tactically feasible to yields a modicum weapons that has within months capabilities and limitations, a political first conference was announced to stop up the final agreement.

The political conference, called the conference on the Disarmament of Nuclear Weapon Tests, met from October 13, 1923, to January 19, 1927, and failed to reach agreement because of the basic differences of opinion over the element of effective control. The negotiations dealing to meetings with the concerning of the Disarmament-Nation Committee on disarmament on March 14, 1961, and they have continued as a part of this conference until the Conference recessed on June 21, 1963. This marked the end of the period of investigation for this paper but has the end of the negotiations.

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The Soviet Union's position as it evolved was for banning all nuclear weapon tests in all environments and the control system they advocated would include a national

detection system, automatic seismic stations, an international scientific commission, and a quota system of on-site inspection.

It would appear that agreement has been reached because they both are talking about the same basic system; the difference is a disagreement in degree. The United States proposes seven automatic seismic stations and seven on-site inspections per year. The Soviet Union proposes three automatic seismic stations and three on-site inspections per year and refuses to budge or consider any other items until acceptance of these figures. To support their stand, they contend that national systems are adequate for policing a ban in all the environments and their agreement to three automatic seismic stations and three on-site inspections is a concession to the West and is not negotiable. The Western position, on the other hand, is viewed as the minimum number of seismic stations and on-site inspections based on the latest scientific evaluation which will ensure effective control and act as a deterrent against possible violations.

Throughout the course of the negotiations, it appeared that an unbreakable deadlock had been reached, only to somehow be broken, usually by correspondence between heads of governments. This has indicated a tremendous interest of the heads of governments to use every means available to continue the negotiations. Why one might ask is this so?

There are four chief reasons why this topic of nuclear weapon testing is so important to be of prime interest to the heads of the Nuclear Powers.

First, there has been a constant world pressure to stop the testing because of the radiation hazards to humanity. There is a difference of opinion as to what this hazard is, but it has been instrumental in keeping the pressure of world opinion on the Nuclear Powers to continue to search for agreement.

Second, each of the Nuclear Powers has realistically stated what the tragic results would be if the arms race is allowed to continue. The test ban is viewed as one way of, at least, slowing down this race.

Third, there is the fact that there must be some start towards reaching agreement between the Nuclear Powers to reduce the risk of nuclear war and to strive towards positive arms control and disarmament measures. The test ban is viewed as one issue where there is the best chance of reaching agreement and thus being the small step that is needed to start the ball rolling.

Fourth, there is the problem of proliferation of nuclear weapons and its resulting increase in international instability and the prospects of nuclear war. The time is ripe now for the stopping of this proliferation when testing is a crucial part of any nuclear weapons

There are five chief reasons why this topic of nuclear weapon testing is so important to be of prime interest to the people of the Nuclear Powers.

First, there has been a constant world pressure to stop the testing because of the radiation hazards to humanity. There is a difference of opinion as to what risk based is, but it has been instrumental in keeping the pressure of world opinion on the Nuclear Powers to continue to search for Agreements.

Second, each of the Nuclear Powers has realistically stated that the single results would be if the other side is allowed to continue. The best lab is viewed as one way of, as Lenin, slowing down this race.

Third, there is the fact that the Nuclear Powers must be aware of the risk of nuclear war and to avoid the possible cure control and disarmament measures. The lab is viewed as one lever where there is the best chance of reasonably agreements and thus having the world step this is needed to where the Nuclear polling.

Fourth, there is the problem of proliferation of nuclear weapons and its resulting increase in international instability and the prospects of nuclear war. The time is ripe now for the stopping of this proliferation when testing is a direct yield of any nuclear weapons.

development program for any nation that has not developed the weapon.

II. CONCLUSION

This brings us up to the point where the question can be asked, where do we go from here?

With the negotiations going on for the last five years under the same advantageous conditions in a world that is constantly changing, will the time be reached when agreement is no longer possible because of the proliferation of the weapons or the discovery of a cheap and simple bomb or a major breakthrough which would upset the military balance?

The history of the negotiations has shown that one cannot be overly optimistic or pessimistic. Although the Soviet Union has held to the present position since January, 1963, the final sessions indicated a possible shift in the Soviet position of some nature in the future. The announcement of the forthcoming talks in Moscow indicate that an agreement is close because the separation between the sides keeping them from reaching agreement is small. Further, practically all of the major progress in the negotiations has been made in private talks or correspondence. However, the Soviet stand in relation to the question of inspection, put forth by the Soviet

development program for any nation that has yet developed the weapon.

II. CONCLUSION

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The history of the nonproliferation has been that one cannot be overly optimistic or pessimistic. Although the Soviet Union has made to the present treaties since January, 1963, the final wording indicated a possibility in the Soviet position of some motives in the future. The announcement of the Australian policy in Vienna indicate that an agreement is close because the separation between the state having these weapons and the rest is small. Further, practically all of the major programs in the industrialized nat have made in private talks or conferences. However, the Soviet demand in relation to the question of inspection, put forth by the United

representative at the last few meetings, could indicate, as the United States representative pointed out, a possible reversal of the Soviet position on inspections.

Although this study covered the period of negotiations from July 1, 1958, to July 1, 1963, a period of five years, subsequent events make it necessary to bring them into this paper. The three Power meetings that were scheduled for July 15, 1963, in Moscow were successful in bringing the negotiations to a partial conclusion with the signing of a limited test ban treaty on August 5, 1963, banning tests in the atmosphere, outer space and underwater with reliance on national detection and identification systems for policing the ban. The Soviet Union accepted this agreement without a moratorium on underground testing reversing their long advanced position in relation to partial test ban treaties.

With the signing of this limited test ban, the chances of a comprehensive ban are very slim. This shift in the Soviet position indicated that she was not willing to accept the principle of inspection. The positions on a comprehensive test ban were very close and would have required a very small move on the part of the Soviet Union to have reached agreement on a comprehensive test ban. However, as the speeches in the latter part of the negotiations of the Eighteen-Nation Committee on Disarmament and

as the United States representative indicated, the Soviet Union was giving second thoughts to the principle of inspection. It appears that the Soviet Union wanted a test ban just as the West desired one, but she was not willing to accept on-site inspections.

What effect does this limited ban have on the mutual advantages that have kept the negotiations plodding on for over five years?

In relation to the humanitarian argument, it completely satisfies this argument because it will ensure against the contamination of the atmosphere by radioactive fallout.

As to the argument that an agreement would slow down the arms race this conclusion is not at all certain. First, with the continuation of underground testing and the arms race shifting to a sophistication of present weapon systems, it would not have an effect on the further development of small sophisticated weapons. Further, the Soviet Union had stated that they would not conduct underground tests because they did not think these tests were necessary. However, there is no doubt that the Soviet Union will, or has already, started a program of underground testing. Therefore, this agreement on a limited ban could shift the arms race from one element of nuclear

as the Indian Tribes representative initially, the Indian Nation was quickly amassed however to the variables of the operation. It appears that the Dwyer Tribe wanted a test but just in the case refused-they but also one not willing to accept re-sale [illegible].

Some after-hand this limited use have on the moral advantages that have kept the negotiations flowing on far more than years.

In relation to the Commission approach, it considerably satisfies this argument because it will always explain the motivations of the shareholders by relationship factors.

As to the argument that an optimum model view does the area view this conclusion is not at all obvious. That, with the modifications of redeployment usually and the pass rate duration be a multiplication of passes weapon systems, it would not have an effect on the further development of small explorations weapons. Further, the Tribal Chiefs had asked this study basic not another negotiation treat because they did not think these study were necessary. However, there is no doubt that the Dwyer Tribe will, or has already, started a program of redevelopment tactics. Therefore, this approach be a limited but could with the area case from one element of tactical

weapons, large megaton weapons, to another, small sophisticated nuclear weapons.

Only time will tell if the agreement will be significant enough to bring about further accommodation between the Nuclear Powers. It is of tremendous significance as it is the best that could be derived out of the series of negotiations and it is what the eight non-aligned nations of the Eighteen-Nation Committee on Disarmament had been advocating since the last deadlock developed in January, 1963.

As to the proliferation of nuclear weapons, there is no doubt that by the number of countries that have signed the Treaty already that it will have a great effect on this problem. A country could develop an underground testing capability, but the cost and the state of the art are such that it is not probable that they would choose to do so. There remains a special problem with respect to France and China as both have refused to adhere to the Treaty. This refusal could have repercussions in other aspects if they continue to test in the atmosphere thus aligning world public opinion against them. For Communist China, which is trying to build up its prestige in the underdeveloped countries, it could effectively tie her hands and force her to move towards underground testing and development. This would increase the expense of the

weapons, large weapons weapons, to another, well applicable related nuclear weapons.

Only time will tell if the agreement will be mutually accepted to their above further recommendation between the duration treaty. It is of tremendous significance as it is the first that could be derived out of the series of negotiations and is to what the multi-sided nature of the nuclear-fission condition, an statement had been effectively since the last Geneva-formulated in January, 1969.

As to the possibilities of nuclear weapons, there is no doubt that by the number of countries that have signed the Treaty already that it will have a great effect on this problem. A country could develop an independent nuclear capability, but the cost and the state of the art are such that it is not probably that they would choose to do so. There remains a special problem with respect to France and China as both have refused to adhere to the treaty. Each nuclear-armed country have expectations in order adhere at they nationals to that in the atmosphere that adjoining with public opinion opinion some, the Chinese China, which is trying to build up its power in the international community, it would effectively the two North and France has be more nuclear-oriented testing and development. This would increase the expense of the

development, require longer periods of time to develop any capability and reduce the overall capability of the finished weapon system.

In the final analysis, it can be said that the history of the negotiations indicates that there was bound to have been an agreement of some sort due to the importance of the issue and the mutual advantages to the Nuclear Powers if common ground for agreement could be found.

The Nuclear Powers have answered the question "To Test or Not to Test" as it affects their national security interests by saying, to test in the atmosphere, outer space and underwater, no; to test underground, yes.

B I B L I O G R A P H Y

BIBLIOGRAPHY

A. PRIMARY SOURCES

1. Official Records

Conference for the Discontinuance of Nuclear Weapon Tests. Verbatim Records of the First through Three Hundred and Fifty-Third Meeting. GEN/DNT/PV.1-353. October 31, 1958-January 29, 1962.

Eighteen-Nation Committee on Disarmament. Verbatim Records of the First through One Hundred and Forty-Seventh Meeting. ENDC/PV.1-147. March 14, 1962-June 21, 1963.

Eighteen-Nation Committee on Disarmament, Subcommittee on a Treaty for the Discontinuance of Nuclear Weapon Tests. Verbatim Records of the First through Fiftieth Meeting. ENDC/SC.1/PV.1-50. March 21, 1962-December 18, 1962.

2. Collected Documents

United States Arms Control and Disarmament Agency. Documents on Disarmament 1961. Washington: Government Printing Office, 1962.

_____. International Negotiations on Ending Nuclear Weapon Tests. Washington: Government Printing Office, 1962.

United States Department of State. Documents on Disarmament 1945-1959. Vol. II. Washington: Government Printing Office, 1960.

_____. Documents on Disarmament 1960. Washington: Government Printing Office, 1961.

3. Publications of the Government

Beam, Jacob D. "A Nuclear Test Ban and Arms Control," The Department of State Bulletin, XLVIII (April 1, 1963), 489-493.

Dean, Arthur H. "United Nations Considers Question of Suspension of Nuclear and Thermonuclear Tests," The

BIBLIOGRAPHY

A. PRIMARY SOURCES

1. Official Records

Conference for the Discontinuance of Nuclear Weapon Tests. Verbatim Records of the Fifty Sessions Three Hundred and Twenty-Second Meeting. CCD/PV.322-372. Geneva: 16, 1962-January 29, 1963.

Disarmament Committee on Disarmament. Verbatim Records of the Fifty Sessions Seventy-Second Meeting. CCD/PV.372-421. Geneva: 29, 1963.

Disarmament Committee on Disarmament. Documentation on a Treaty for the Discontinuance of Nuclear Weapon Tests. Verbatim Records of the Fifty Sessions Fifteen Meeting. CCD/PV.415-420. Geneva: 29, 1963.

2. Cultural Documents

United States Arms Control and Disarmament Agency. Documents on Disarmament 1963. Washington: Government Printing Office, 1963.

_____. Diplomatic Negotiations on Nuclear Weapon Tests Ban Treaty. Washington: Government Printing Office, 1963.

United States Department of State. Documents on Disarmament 1962. Vol. II. Washington: Government Printing Office, 1962.

_____. Documents on Disarmament 1963. Washington: Government Printing Office, 1963.

3. Publications of the Government

Bunn, John G. "A Nuclear Test Ban and Arms Control," The Department of State Bulletin, XLVIII (April 1, 1963), 528-533.

Dunn, Arthur H. "United States Nuclear Weapons Testing as Suspension of Nuclear and Thermonuclear Tests," The

Department of State Bulletin, XLVII (November 26, 1962), pp. 817-825.

Foster, William C. "Risk and Security in the Age of Nuclear Weapons," The Department of State Bulletin, XLVIII (January 28, 1963), pp. 128-134.

_____. "The Nuclear Test Ban Issue," The Department of State Bulletin, XLVIII (March 18, 1963), pp. 398-402.

Gehron, William J. "Geneva Conference on the Discontinuance of Nuclear Weapon Tests," The Department of State Bulletin, XLIII (September 26, 1960), pp. 482-497.

Gullion, Edmund A. "Disarmament Issues and Prospects," The Department of State Bulletin, XLIV (May 1, 1961), pp. 635-639.

Kennedy, John F. "U.S. and U.S.S.R. Exchange Views on Nuclear Test Ban," "Exchange of Letters, President Kennedy and Chairman Khrushchev," The Department of State Bulletin, XLVIII (February 11, 1963), pp. 198-202.

Rusk, Dean. "U.S. Efforts to Achieve Safeguarded Test Treaty," The Department of State Bulletin, XLVIII (April 1, 1963), pp. 485-489.

United States Arms Control and Disarmament Agency. "A Summary of Developments at the Conference of the 18-Nation Committee on Disarmament, Geneva, March 14-June 15, 1962," The Department of State Bulletin, XLVII (July 23, 1962), pp. 154-159.

United States Disarmament Administration. Geneva Conference on the Discontinuance of Nuclear Weapon Tests. Washington: Government Printing Office, 1961.

United States Executive Office of the President. "U.S. and U.K. Propose Banning Nuclear Tests in Atmosphere, Soviet Resumption of Weapons Tests Called Strategy of Terror," The Department of State Bulletin, XLV (September 18, 1961), pp. 475-477.

_____. _____ _____ _____ _____, _____ _____ _____ _____, 1941, pp. 91-103.

_____, William C. "Risk and Security in the Age of Nuclear Weapons," _____ _____ _____ _____ _____, Winter 1961, pp. 129-139.

_____. "The Nuclear Test Ban Issue," _____ _____ _____ _____ _____, State Series 14, 1963, pp. 15-23.

_____, William C. "Weapons Delivery or the Disarmament of Nuclear Nations Exists," _____ _____ _____ _____, State Series 12, 1963, pp. 101-107.

_____, Conrad A. "Disarmament Issues and Diplomacy," _____ _____ _____ _____, May/June 1, 1961, pp. 115-117.

_____, John F., H.L.E. and R.S.K., Conference Views on Nuclear Test Ban," "Advance of Leaders, President Kennedy and Chairman Khrushchev," _____ _____ _____ _____, Winter Series (Winter) 12, 1963, pp. 1[illegible]-[illegible].

_____, John. "U.S. Efforts to Achieve Disarmed Test Ban," _____ _____ _____ _____, Series 1, 1963, pp. 1[illegible]-[illegible].

_____ _____ _____ _____ _____ _____. "A Summary of Developments in the Conference of the 18-Nation Committee on Disarmament, Geneva, March 14-June 21, 1962," _____ _____ _____, Series 12, 1962, pp. 1[illegible]-1[illegible].

_____ _____ _____ _____ _____. _____ _____ _____ _____ _____ _____ _____ _____ _____ _____, 1963.

_____ _____ _____ _____ _____ _____ _____ _____ _____ _

B. SECONDARY SOURCES

1. Books

Barnet, Richard J. Who Wants Disarmament? Boston: Beacon Press, 1960.

Beaton, Leonard and James R. Maddox. The Spread of Nuclear Weapons. New York: Frederick A. Praeger, 1962.

Bechhoefer, Bernhard G. Postwar Negotiations for Arms Control. Washington: The Brookings Institution, 1961.

Bennett, John C. (ed.). Nuclear Weapons and the Conflict of Conscience. New York: Charles Scribner Sons, 1962.

Bull, Hedley. The Control of the Arms Race. New York: Frederick A. Praeger, 1961.

Etzioni, Amitai. The Hard Way to Peace. New York: Collier Books, 1962.

Frisch, David H. (ed.). Arms Reduction Program and Issues. New York: The Twentieth Century Fund, 1961.

Fromm, Erich. May Man Prevail? New York: Doubleday and Company, 1961.

Fuller, Helen. Year of Trial. New York: Harcourt, Brace and World, 1962.

Gardner, John W. (ed.). To Turn the Tide. New York: Harper and Brothers, 1962.

Gilpin, Robert G. American Scientists and Nuclear Weapons Policy. Princeton, New Jersey: Princeton University Press, 1962.

Hinds, Neal O. Proving Grounds. Seattle, Washington: University of Washington Press, 1963.

Hadley, Arthur T. The Nations Safety and Arms Control. New York: The Viking Press, 1961.

Hahn, Walter F. and John C. Neff. American Strategy for the Nuclear Age. New York: Doubleday and Company, 1960.

B. SECONDARY SOURCES

1. Books

Barnett, Ralph T. The Tudor Chronicles. Boston: Ginn and Company, 1929.

Barton, Lucille and James E. Barton. The Course of Foreign Commerce. New York: Prentice Hall, Inc., 1952.

Beckwith, Frederick H. Creative Activities for Junior Schools. Cambridge: The Heffer Printing Co., 1961.

Beverly, John C. (ed.). Modern Geography and Its Contribution to Civilization. New York: Oxford University Press, 1962.

Bull, Bailey. The Control of the Land Sea. New York: Foundation in Science, 1962.

Carlson, Walter. The Land Are Is Green. New York: Dutton Book, 1963.

Fields, Jerry E. (ed.). Some Geographic Concepts and Issues. New York: The Twentieth Century Fund, 1962.

Fuller, Blake. Our Ever Changing. New York: Dominant and Company, 1963.

Hales, Trevor. Land of Plenty. New York: Lippincott, Inc. and Co., 1962.

Hanson, John W. (ed.). To Have the Time. New York: Harper and Brothers, 1962.

Hilgin, Robert E. Creative Activities and Junior Science Fairs. Richmond: Richmond Hill Publishing Company, 1962.

Hunt, Noel C. Teaching Geography. Boston: Houghton Mifflin Company of Washington Press, 1963.

Jenkins, Arthur T. The Geology Fields and Land Geology. New York: The Ronald Press, 1963.

Jones, Walter T. and John C. Hart. Geography Exercises for Secondary Schools. New York: Prentice and Company, 1963.

Kindley, Ernest K. (ed.). The Winds of Freedom. Boston: Beacon Press, 1963.

Kissinger, Henry A. Nuclear Weapons and Foreign Policy. New York: Doubleday and Company, 1958.

_____. The Necessity for Choice. New York: Harper and Brothers, 1961.

Lefever, Ernest W. (ed.). Arms and Arms Control. New York: Frederick A. Praeger, 1962.

Lippmann, Walter. The Coming Tests with Russia. Boston: Little, Brown and Company, 1961.

Murray, Thomas E. Nuclear Policy For War and Peace. New York: World Publishing Company, 1960.

Noel-Baker, Philip. The Arms Race. New York: Oceana Publications, 1958.

Nogee, Joseph L. Soviet Policy Towards International Control of Atomic Energy. Notre Dame, Indiana: University of Notre Dame Press, 1961.

Nutting, Anthony. Disarmament. New York: Oxford University Press, 1959.

Pauling, Linus. No More War. New York: Dodd, Mead and Company, 1958.

Schelling, Thomas C. and Morton H. Halperin. Strategy and Arms Control. New York: The Twentieth Century Fund, 1961.

Spanier, John W. and Joseph I. Nogee. The Politics of Disarmament. New York: Frederick A. Praeger, 1962.

Teller, Edward and Albert L. Latter. Our Nuclear Future. New York: Criterion Books, 1958.

Teller, Edward. The Legacy of Hiroshima. New York: Doubleday and Company, 1962.

Wadsworth, James J. The Price of Peace. New York: Frederick A. Praeger, 1962.

Kimball, Ernest E. (ed.). The Stand of Freedom. Boston: Beacon Press, 1961.

Kissinger, Henry A. Nuclear Weapons and Foreign Policy. New York: Doubleday and Company, 1958.

_____. The Troubled Peace. New York: Harper and Brothers, 1962.

Lefever, Ernest W. (ed.). Ethics and Image Control. New York: Frederick A. Praeger, 1967.

Lippmann, Walter. The Public Stand with Freedom. Boston: Little, Brown and Company, 1955.

Murray, Thomas E. Nuclear Policy for War and Peace. New York: Horizon Publishing Company, 1959.

Rostenkowski, Philip. The Long Fuse. New York: Vantage Publications, 1963.

Rogers, Joseph E. Social Policy Towards Technological Control of Human Behavior. Ann Arbor: University of Michigan Press, 1961.

Rusk, Anthony. Disarmament. New York: Oxford University Press, 1962.

Russell, Bertrand. Ex Post Facto. New York: Bobbs, Merrill Company, 1959.

Schelling, Thomas C. and Morton H. Halperin. Strategy and Arms Control. New York: The Twentieth Century Fund, 1961.

Spanier, John W. and Joseph L. Nogee. The Politics of Disarmament. New York: Frederick A. Praeger, 1962.

Talley, David and Albert L. Latner. The Nuclear Threat. New York: Citadel Press, 1963.

Teller, Edward. The Legacy of Hiroshima. New York: Doubleday and Company, 1962.

Wolfowitz, Jacob J. The Price of Peace. New York: Doubleday & Company, 1962.

2. Learned Societies and Other Organizations

National Planning Association. Establishing International Control of Nuclear Testing. Special Report N50. Washington: National Planning Association, July 21, 1958.

_____. The Nth Country Problem and Arms Control. Planning Pamphlet N108. Washington: National Planning Association, 1960.

3. Periodicals

Finkelstein, Lawrence S. "Arms Inspection," International Conciliation N. 540 (November 1962), pp. 1-89.

4. Unpublished Materials

American Academy of Arts and Sciences. "Is Disarmament Now Possible?" Daedalus on the Air. Transcript of radio broadcast of April 6, 1963. Boston: American Academy of Arts and Sciences, 1963.

5. Newspapers

Washington Post, June-August 1963.

A P P E N D I X

APPENDIX A

AGREED PARTS OF THE DRAFT TREATY ON THE DISCONTINUANCE OF NUCLEAR WEAPON TESTS

Agreed text of Preamble

The Parties to this Treaty

Pursuing the aim of reducing international competition in armaments and in the development of new weapons of war;

Endeavouring to take a practical step towards the achievement of the objectives of the United Nations in the field of disarmament including the eventual elimination and prohibition of nuclear weapons under effective international control and the use of atomic energy for peaceful purposes only;

Desirous of bringing about the permanent discontinuance of nuclear weapons test explosions;

Recognizing that the establishment and continuous operation of effective international control is essential to the achievement of this objective;

Hoping that all other countries will also join in undertakings not to carry out nuclear weapons tests and to ensure the satisfactory operation of that control throughout the world;

Confident that a discontinuance of such tests under effective control will make possible progress toward agreement on measures of disarmament have agreed as follows:

Texts of Agreed Draft Articles

Article 1

Each of the Parties to this Treaty undertakes, subject to the provisions of this Treaty and its annexes:

(a) to prohibit and prevent the carrying out of nuclear weapons test explosions at any place under its jurisdiction or control; and

(b) to refrain from causing, encouraging, or in any way participating in, the carrying out of nuclear weapons test explosions anywhere.

Article 2

(a) For the purpose of assuring that the obligations

assumed in this Treaty are carried out by the Parties there is hereby established a Control Organization upon the terms and conditions set forth in this Treaty and the Annexes thereto;

(b) Each of the Parties agrees to co-operate promptly and fully with the Control Organization established under paragraph (a) of this Article and to assist the Control Organization in the discharge of its responsibilities pursuant to the provisions of this treaty and the provisions of any agreement which the Parties shall have concluded with the Control Organization.

Article 3

1. The Control Organization established under Article 2 of this Treaty shall consist of: a Control Commission, hereinafter referred to as "the Commission"; a Detection and Identification System, hereinafter referred to as the "System"; a Chief Executive Officer, hereinafter referred to as "the Administrator"; and a Conference of Parties to the Treaty, hereinafter referred to as "the Conference."

2. The Headquarters of the Control Organization shall be located at Vienna.

Article 4

1. The Commission shall consist of one representative from each of the following States:

(a) The Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, as original Parties to this Treaty; and

(b) four other Parties to the Treaty elected by the Conference.

2. The States referred to in paragraph 1(b) of this Article shall be elected and shall serve for a period of two years, and shall be eligible for re-election.

3. The representatives elected to the first elected Commission shall serve from the time of their election until the end of the third regular session of the Conference. The representatives elected at the third regular session of the Conference, and biennially thereafter, shall serve from the end of the Conference at which they are elected until the end of the Conference which elects their successors.

INSTALLATION AND OPERATION OF THE SYSTEM IN PARTIES' TERRITORIES

Each of the original Parties and all other Parties to this Treaty agree to accept on territory under their jurisdiction or control components of the System which is established on the basis of the report of the Conference of Experts to Study the Methods of Detecting Violations of a Possible Agreement on the Suspension of Nuclear Tests and shall be installed and shall operate in accordance with the provisions of this Treaty and its Annexes.

UNDERTAKINGS CONCERNING CO-OPERATION WITH THE SYSTEM

1. Each of the Parties undertakes to assure that adequate and expeditious transportation is available from the point of entry, or within its territory to the site of any element of the System or any area where an on-site inspection is to be conducted.

2. Each of the Parties undertakes to enter into appropriate arrangements with the Commission for the utilization of existing meteorological and commercial aircraft flights over ocean areas for routine air-sampling purposes.

3. Each of the Parties undertakes to enter into appropriate arrangements with the Commission to have aircraft immediately available for special flights, carried out pursuant to the provisions of ___, over territory under its jurisdiction or control or to permit special flights by aircraft forming part of the system.

4. Each of the Parties undertakes to enter into appropriate arrangements with the Commission for the utilization of existing weather or geophysical exploration vessels for use as components of the System.

5. Each of the Parties undertakes to give inspection groups, despatched pursuant to the provisions of ___, immediate and undisputed access to the area in which an on-site inspection is to be conducted, to refrain from interference with any operation of an inspection group and to give such groups the assistance they may require in the performance of their missions.

6. (Paragraph 6 will be drafted to make provision for high-altitude detection after this matter has been further discussed).

THE CONFERENCE

1. The Conference consisting of representatives of

Parties to the Treaty shall meet in regular annual session and in such special sessions as shall be convened by the Administrator at the request of the Commission or a majority of Parties to the Treaty. The sessions shall take place at the headquarters of the Organization unless otherwise determined by the Conference.

2. At such sessions, each Party to the Treaty shall be represented by not more than three delegates who may be accompanied by alternates or advisers. The cost of attendance of any delegation shall be borne by the State concerned.

3. The Conference shall elect a President and such other officers as may be required at the beginning of each session. They shall hold office for the duration of the session. The Conference, subject to the provisions of this Treaty, shall adopt its own rules of procedure. Each Party to the Treaty shall have one vote. Decisions on budgetary matters shall be made pursuant to Article ___ and decisions on amendments pursuant to Article ___. Decisions on other questions, including the determination of additional questions or categories of questions to be decided by a two-thirds majority, shall be made by a simple majority of the Parties to the Treaty present and voting.

4. The Conference may discuss any questions or any matters within the scope of this Treaty or relating to the powers and functions of any organs provided for in this treaty and may make recommendations to the Parties or to the Commission or to both on any such question or matters.

5. The Conference shall:

(a) Elect States to serve on the Commission in accordance with Article 4;

(b) consider the annual and any special report of the Commission;

(c) approve the budget recommended by the Commission in accordance with paragraph ___ of Article ___;

(d) approve reports to be submitted to the United Nations as required by any relationship agreement between the Organization and the United Nations; or return them to the Commission with the recommendations of the Conference;

(e) approve any agreement or agreements between the Organization and the United Nations or other organizations as provided in Article ___ or return such agreement with its recommendations to the Commission for re-submission to the Conference;

(f) approve amendments to this Treaty in accordance with Article ____.

6. The Conference shall have the authority:

(a) to take decisions of any matter specifically referred to the Conference for this purpose by the Commission;

(b) to propose matters for consideration by the

Commission and request from the Commission reports on any matter relating to the functions of the Commission.

PERIODIC REVIEW OF THE SYSTEM

1. Two years after the coming into force of this Treaty, the Commission shall review the System established under this Treaty in order to:

(a) evaluate its effectiveness for verifying compliance with the obligations set forth in Article 1 and ___ of this Treaty;

(b) determine in the light of experience and scientific progress whether any specific improvements should be made or new elements added to the System;

(c) consider such measures to improve or maintain the effectiveness of the System as may be proposed by any Party to the Treaty in the light of experience in the operation of the Treaty.

2. The System may be reviewed by the Commission annually thereafter for the same purpose upon request of the Conference or any of the original Parties.

PRIVILEGES AND IMMUNITIES

The privileges and immunities which the Organization, its staff and the representatives of Parties shall be granted by the Parties, and the legal capacity which the organization shall enjoy in the territory of each of the Parties, shall be as set forth in Annex II of this treaty.

RELATIONSHIPS WITH OTHER INTERNATIONAL ORGANIZATIONS

1. The Commission, with the approval of the Conference, is authorized to enter into an agreement or agreements establishing an appropriate relationship between the Organization and the United Nations.

2. The Commission, with the approval of the Conference, shall arrange for the Organization to be brought into an appropriate relationship with any international organization which may in the future be established among the Parties to the Treaty to supervise disarmament and arms control measures.

Commission and reports from the Conciliation reports on any matter relating to the functions of the Commission.

PERIODIC REVIEW OF THE TREATY

1. Two years after the coming into force of this Treaty, the Commission shall review the types mentioned under this Treaty in order to:

(a) evaluate the effectiveness in verifying compliance with the obligations set forth in Article I and of this Treaty;

(b) determine in the light of knowledge and achievements which provisions may appropriately be made to new elements added to the system;

(c) consider such measures to improve or maintain the effectiveness of the System as may be proposed by any Party to this Treaty in the light of experience in the operation of the Treaty.

2. The System may be revised by the Commission annually thereafter for the same purpose upon request of the Conference or any of the original Parties.

RATIFICATION AND DEPOSITARY

The privileges and immunities which the Organization, its staff and the representatives of Parties shall be granted by the Parties, and the legal capacity which the Organization shall enjoy in the territory of each of the Parties, shall be as set forth in Annex II of this Treaty.

RELATIONSHIP WITH OTHER INTERNATIONAL ORGANIZATIONS

1. The Commission, with the approval of the Conference, is authorized to enter into an agreement or agreements establishing an appropriate relationship between the Organization and the United Nations.

2. The Commission, with the approval of the Conference, shall arrange for the representation to be deemed fair as appropriate relationship with any international organization which may in the future be established among the Parties to the Treaty to coordinate assistance and area product measures.

ANNEXES

The Annexes to this Treaty form an integral part of this treaty.

PARTIES TO THE TREATY

The Parties to this Treaty shall be:

1. The Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, referred to herein as the "original Parties".

2. (Item 2 will contain provision for other States to become parties to the agreement. Although there is agreement in principle on this part, language has not yet been worked out among the three negotiating powers.)

SIGNATURE, RATIFICATION, ACCEPTANCE AND ENTRY INTO FORCE

1. This Treaty shall be open for signature on ___ by the States referred to in paragraph ___ of Article ___, and shall remain open for signature by those States for a period of six months.

2. The signatory States shall become Parties to this Treaty by deposit of an instrument of ratification.

3. Instruments of ratification by signatory States and instruments of acceptance by States referred to in paragraph 2 of Article ___ shall be deposited with the Government of _____, hereby designated as the depositary Government.

4. Ratification or acceptance of this Treaty shall be effected by States in accordance with their respective constitutional processes.

5. This Treaty shall enter into force when all the original Parties have deposited instruments of ratification in accordance with paragraph 3 of this Article. Instruments of ratification and instruments of acceptance deposited hereafter shall take effect on the date of their deposit.

6. The depositary Government shall promptly inform all States signatory to the Treaty of the date of each deposit of ratification and the date of entry into force of the Treaty. The depositary Government shall promptly inform all signatories and Parties to the Treaty of the dates on which States subsequently become Parties thereto.

[illegible]

[illegible] to this treaty form an integral part of this treaty.

PARTIES TO THE TREATY

The Parties to this Treaty shall be:

1. The Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, referred to herein as the "original Parties";

2. Other [illegible] will become parties to the treaty [illegible] in accordance with its terms. Although there has not been [illegible] among the three negotiating powers.

[illegible], RATIFICATION, [illegible]

1. This Treaty shall be open for signature at ___ by the Parties referred to in paragraph ___ of Article ___, and shall remain open for signature by those Parties for a period of six months.

2. The signatory States shall become Parties to this Treaty by deposit of an instrument of ratification.

3. Instruments of ratification by signatory States and instruments of adhesion by States invited to be parties under [illegible] of Article ___ shall be deposited with the Government of _____, hereby designated as the depositary Government.

4. Ratification or adhesion of this Treaty shall be effected by States in accordance with their constitutional procedures.

5. This Treaty shall enter into force when all the original signatory Parties have deposited instruments of ratification, or [illegible] with paragraph 1 of this Article. Instruments of ratification and instruments of adhesion deposited thereafter shall take effect on the date of their deposit.

6. The depositary Government shall promptly inform all States signatory to the Treaty of the date of any deposit of ratification and the date of entry into force of the Treaty. The depositary Government shall promptly inform all signatories and parties to the Treaty of the date on which States invited pursuant to paragraph [illegible] become Parties thereto.

REGISTRATION

1. This Treaty shall be registered by the depositary Government pursuant to Article 102 of the Charter of the United Nations.

2. Agreements between the Organization and any Party to this Treaty or any other State or public international organization shall be submitted for registration by the Commission with the United Nations.

DURATION

This Treaty shall remain in force indefinitely subject to the inherent right of a Party to withdraw and be relieved of obligations hereunder if the provisions of the Treaty and its Annexes, including those providing for the timely installation and effective operation of the control system, are not being fulfilled and observed.

AMENDMENTS

Amendments to this Treaty and its Annexes shall enter into force for all Parties to the Treaty when they have been adopted by a vote of two-thirds of the Members of the Conference and ratified in accordance with their respective constitutional processes by two-thirds of the Parties to the Treaty, including the original Parties.

AUTHENTIC TEXTS

This Treaty, of which the English and Russian texts are equally authentic, shall be deposited in the archives of the depositary Government. Duly certified copies of this Treaty shall be transmitted by the depositary Government to the Governments of the other signatory States and to the Governments of States which become Parties to this Treaty pursuant to paragraph ___ of Article ___.

IN WITNESS WHEREOF the undersigned, duly authorized, have signed this Treaty.

Done at _____ this ____ day of _____, one thousand nine hundred and _____.

DEPOSITARY

5. This treaty shall be deposited in the depositary arrangement provided in Article III of the Charter of the United Nations.

6. Agreements between the Organization and any party to this Treaty or any other state or public international organization shall be negotiated via registration by the Secretariat with the United Nations.

RATIFICATION

This treaty, shall remain in force indefinitely, subject to the inherent right of a party to withdraw, and be governed of obligations hereunder in the provisions of this Treaty and its Annexes, including those providing for the timely initiation and effective supervision of the overhead system, and such being particular and distinct.

AMENDMENTS

Amendments to this Treaty and its Annexes shall enter into force for all parties to the Treaty when they have been adopted by a vote of two-thirds of the members of the Conference and ratified in accordance with their respective constitutional processes by two-thirds of the parties to the Treaty, including the nuclear powers.

ALTERNATIVE TEXTS

This Treaty, of which the English and Russian texts are equally authentic, shall be deposited in the archives of the Depositary Government. Duly certified copies of this Treaty shall be transmitted by the Depositary Government to the Governments of the other signatory states and to the Governments of those states which become parties to this Treaty pursuant to paragraph ___ of Article ___.

In witness whereof the undersigned, being duly authorized, have signed this Treaty.

Done in _____ this ____ day of _____ one thousand nine hundred and _____.

Text of Agreed Draft Annex II.

Article 1

DEFINITIONS

In this Annex:

(1) The expression "representatives of Parties to this Treaty" includes representatives on or to any organ of the Organization established under the provisions of this Treaty, including the Conference, together with the members of their official staffs.

(2) The expression "representatives of Parties to this Treaty on the Control Commission" includes all members of the official staffs of such representatives except those whose duties are clerical. For the purpose of this Annex such clerical personnel shall be deemed to come within the class of persons referred to in sub-paragraph (1) of this Article.

(3) The expression "members of the Organization staff" includes the Administrator and all employees of the Organization.

(4) The term "expert" shall mean an individual performing a mission on behalf of the Organization either at the headquarters of the Organization or in the territory of a Party to this Treaty.

(5) The term "host government" shall mean the government of the country in which the headquarters of the Organization is located.

Article 2

JURIDICAL PERSONALITY

A. The Organization shall possess juridical personality. It shall have the capacity (a) to contract, (b) to acquire and dispose of property (c) to institute and defend legal proceedings.

B. The Organization may provide for suitable identification of ships and aircraft employed on the official service of the Organization.

ARTICLE 1

DEFINITIONS

In this Annex:

(1) The expression "representatives of Parties to this Treaty" includes representatives on or to any organs of the Organization established under the provisions of this Treaty, including the Conference, meeting with the members of their official staffs.

(2) The expression "representative of Parties to this Treaty" or the Chairman Designate includes all members of the national staffs of such representatives under their orders and also all technical and other persons attached to the Organization (1) of this article.

(3) The expression "member of the Organization staff" includes the Secretariat and all employees of the Organization.

(4) The term "expert" shall mean an individual performing a mission on behalf of the Organization without as the sum-[illegible] of the Organization or in the territory of a Party to this Treaty.

(5) The term "land" shall mean the territory of the country in which the headquarters of the Organization is located.

ARTICLE 2

JURIDICAL PERSONALITY

(a) The Organization shall possess juridical personality. It shall have the capacity (1) to contract, (2) to acquire and dispose of property (3) to institute and defend legal proceedings.

(b) The Organization may provide for suitable identification of Party and different employed in the official service of the Organization.

Article 3

PROPERTY, FUNDS AND ASSETS

A. The Organization, its property and assets, wherever located and by whomsoever held, shall enjoy immunity from every form of legal process except in so far as in any particular case the Commission, on behalf of the Organization, has expressly waived this immunity, but such express waiver of immunity shall not extend to any measure of execution or detention of property.

B. The premises of the organization shall be inviolable. The property and assets of the Organization, wherever located and by whomsoever held, shall be immune from search, requisition, confiscation, expropriation and any other form of interference, whether by executive, administrative, judicial or legislative action.

C. The archives of the Organization and all documents belonging to it or held by it or by the staff or experts on its behalf shall be inviolable wherever located.

D. The Organization, without being restricted by financial controls, regulations or moratoria of any kind, may, subject to the obligation to give effect as far as is practicable to representations made to it by any Party, exercise the following rights:

(1) to hold currency of any kind and operate accounts in any currency;

(2) to transfer its funds freely from, to, or within any country Party to this Treaty and convert any currency held by it into any other currency.

E. The Organization, its assets, income and other property shall be:

(1) Exempt from all direct taxes except those taxes which are in reality a charge for specific services;

(2) Exempt from all customs duties, prohibitions and restrictions on imports and exports in respect of articles imported or exported by the Organization for its official use; articles imported under such exemption shall not be disposed of, by sale or by gift, in the country into which they are imported except under conditions approved by the Government of that country;

(3) Exempt from all customs duties, prohibitions and restrictions on imports and exports in respect of its publications.

F. The Organization shall be exempt from taxes imposed directly on its expenditure transactions but not exempt from those taxes which are in reality a charge for specific services.

Article 7

TRIBUNALS, FORMS AND PLACES

A. The tribunals, the property and assets, wherever located and by whomsoever held, shall enjoy immunity from every form of legal process except in so far as in any particular case the Commission, on behalf of the Tribunals, has expressly waived this immunity, but such waiver shall not be deemed to extend to any measure of execution or deprivation of property.

B. The premises of the tribunals shall be inviolable; the property and assets of the tribunals, wherever located and by whomsoever held, shall be immune from search, requisition, confiscation, expropriation and any other form of interference, whether by executive, administrative, judicial or legislative action.

C. The archives of the tribunals and all documents belonging to them shall be at no time and in no place be the object of search or seizure.

D. The tribunals, without being restricted by financial controls, regulations or moratoria of any kind, may, subject to the obligations to give effect as far as is practicable to announcements made to it by the Tribunal, exercise the following rights:

(1) to make transfers of any kind and operate accounts in any currency;

(2) to transfer its funds freely from, to, or within any country dealt by its with any other currency;

E. The tribunals, its assets, income and other property shall be:

(1) exempt from all direct taxes except those taxes which are in reality a charge for specific services;

(2) exempt from all customs duties, prohibitions and restrictions on imports and exports in respect of articles imported or exported by the tribunals for its official use; any articles imported under such exemption shall not be disposed of, by sale or by gift, in the country into which they are imported except under conditions approved by the government of that country;

(3) exempt from all customs duties, prohibitions and restrictions on imports and exports in respect of its publications.

F. The tribunals shall be exempt from taxes imposed directly on its organizations transactions but not exempt from those taxes which are in reality a charge for specific services.

while in the territory of another Party in the discharge of their official duties and during their journey to and from the place of meeting, the following privileges and immunities:

(1) Immunity from arrest, detention or any legal process with respect to words spoken or written and acts done by them in their official capacity;

(2) Inviolability for all their official papers and documents;

(3) The right to use codes, couriers, and sealed bags in communicating with their Governments, their staffs and with the Organization;

(4) The same exemption in respect of themselves and their spouses from immigration restrictions, aliens' registration and national service obligations as is accorded to comparable categories of the staffs of diplomatic missions;

(5) The same facilities with respect to currency or exchange restrictions as are accorded to comparable categories of the staffs of diplomatic missions;

(6) The same immunities and facilities with respect to their personal baggage as are accorded to comparable categories of the staffs of diplomatic missions;

(7) The right to import free of duty their furniture and effects as the time of first arrival to take up their posts in the territory of a Party and, on the termination of their functions there, to re-export such furniture and effects free of duty; furniture and effects so imported shall not be disposed of, by sale or by gift, in such territory except under conditions approved by the Government thereof.

D. A representative to whom this Article applies shall, during any period when he is present in the territory of another Party for the discharge of his duties, be exempt from taxation on his official salary and emoluments, and where the legal incidence of any other form of taxation depends upon residence, any such period shall, for the purposes of determining his liability to taxation, be treated as not being a period of residence in that territory.

E. The Administrator shall communicate to the Parties concerned the names of the representatives and members of their official staffs to whom paragraph B of this Article applies and the probable duration of their stay in the territories of such other Parties.

F. The privileges and immunities accorded under paragraphs A, B, and C are not for the personal benefit of the individuals themselves, but in order to safeguard the independent exercise of their functions in connexion with the Organization.

Article 4

COMMUNICATIONS

A. Each Party shall take appropriate steps necessary to ensure that its domestic and international telecommunication services accord to telecommunications of the Organization treatment at least equal to government telecommunications with respect to priority of transmission, and accord these telecommunications higher priority, i.e., special priority as accorded to the United Nations Organization in emergencies, when requested, and that rates charged shall be no higher than minimum government rates. Postal communications shall be handled in the most expeditious manner possible.

B. No censorship shall be applied to the official correspondence and other official communications of the Organization.

C. The Organization shall have the right to use codes known to all Parties and to despatch and receive by courier or in sealed bags only official correspondence, other official communications and objects intended for official use. Such couriers and sealed bags shall have the same immunities and privileges as diplomatic couriers and bags.

D. Nothing in paragraphs B and C. of this Article shall be construed to preclude the adoption of appropriate security precautions to be determined by agreement between a Party and the Organization.

Article 5

REPRESENTATIVES OF PARTIES TO THIS TREATY

A. Representatives of Parties to this Treaty on the Control Commission shall enjoy in, the territory of the host government, the same privileges and immunities as the host government accords diplomatic envoys accredited to it.

B. Representatives of Parties to this Treaty on the Control Commission shall enjoy, while present in the territory of another Party in the discharge of Commission duties, the same privileges and immunities as the Party accords diplomatic envoys accredited to it.

C. Representatives of Parties to this Treaty shall enjoy, while present in the territory of the host government and

Consequently, a Party not only has the right, but is under a duty to saive the immunity of its representatives and their staffs in any case where, without prejudice to the purposes for which the immunity is accorded.

G. The provisions of Paragraphs A to E above shall not require any Party to grant any of the privileges and immunities referred to therein to any person who is its national or any person who is its representative or is a member of the staff of such representative.

Article 6

Organization Staff and Experts

A. The Administrator and the deputies of the Administrator shall be accorded the privileges and immunities normally accorded to diplomatic envoys.

B. All other members of the Organization staff shall be accorded the following privileges and immunities:

(1) Immunity from arrest or detention whenever assigned to a control post, an inspection group, or a routine or special flight; and at all times immunity from arrest, detention or any legal process with respect to words spoken or written and acts done by them in the performance of their official functions;

(2) The same facilities with respect to currency or exchange restrictions as are accorded to comparable categories of the staffs of diplomatic missions;

(3) The same immunities and facilities with respect to their personal baggage as are accorded to comparable categories of the staffs of diplomatic missions;

(4) The same exemption from immigration restrictions, aliens' registration and national service obligations for themselves, their spouses and members of their immediate families residing with them and dependent on them as is accorded to comparable categories of the staffs of diplomatic missions;

(5) The same repatriation facilities in time of international crisis for themselves, their spouses and members of their immediate families residing with them and dependent on them, as are accorded to comparable categories of the staffs of diplomatic missions;

(6) The right to import free of duty their furniture and effects at the time of first arrival to take up their

posts in the territory of a Party and, on the termination of their functions there, to re-export such furniture and effects free of duty; furniture and effects so imported shall not be disposed of, by sale or by gift, in such territory except under conditions approved by the Government thereof.

C. Every expert performing a mission for the Organization either at the headquarters of the Organization or in the territory of a Party shall be accorded the following privileges and immunities:

(1) Immunity from arrest or detention;

(2) Immunity from legal process in respect to words spoken or written and acts done by him in the performance of his official functions;

(3) The same exemption from immigration restrictions, aliens' registration and national service obligations as is accorded to comparable categories of the staffs of diplomatic missions;

(4) Immunities and privileges specified in items (2) and (3) of paragraph B of this Article.

D. Every member of the Organization staff and every expert shall be exempt from taxation on the salaries and emoluments paid him by the Organization.

E. The Administrator shall keep the Parties currently informed as to each individual to whom any of the foregoing paragraphs of this Article is applicable. A Party shall always be entitled to notification of the name and responsibility of any such individual before his arrival for official duties in the territory of that Party, so that it may have an opportunity to comment to the Administrator upon the proposed assignment of such expert or member of the Organization staff.

F. Privileges and immunities are granted to members of the Organization staff and to experts in the interests of the Organization and not for the personal benefit of the individuals themselves. The Administrator shall have the right and the duty to waive the immunity of any such individual in any case where the immunity would impede the course of justice and can be waived without prejudice to the interests of the Organization. In the case of the Administrator his immunity may be waived by the Commission provided the Commission finds the immunity would impede the course of justice and can be waived without prejudice to the interests of the Organization.

G. The provisions of paragraphs A to D inclusive above shall not require any Party to grant any of the privileges and immunities referred to therein to any person who is its national, except:

(1) Immunity from arrest, detention or any legal process with respect to words spoken or written and acts

done by him in the performance of his official functions for the Organization;

(2) Facilities with respect to currency or exchange restrictins so far as necessary for the effective exercise of his functions.

Article 7

ABUSES OF PRIVILEGES

A. The Organization shall at all times cooperate with the appropriate authorities of Parties to facilitate the proper administration of justice, secure the observance of police regulations, and prevent the occurrence of an abuse of the privileges and immunities set out in this Annex.

B. If any Party considers that there has been an abuse of the privilege of residence in its territory or of any other privilege or immunity granted by this Annex, the following procedure shall be adopted:

(1) In the case of an abuse by the Administrator, consultations shall be held between the Party and the Commission to determine the action to be taken.

(2) In the case of an abuse by any individual referred to in paragraphs (1) or (2) of Article 1, the Party which considers that there has been an abuse may, after consultation with the Party whose representative is concerned and in accordance with the diplomatic procedures applicable to diplomatic envoys accredited to the former Party, require the representative to leave its territory.

(3) In the case of an abuse by any individual referred to in paragraph B and C of Article 6, the Party which considers that there has been an abuse may, after consultation with the Administrator and, in the event of disagreement, with the Commission, require the Administrator to arrange for an immediate replacement.

Article 8

LAISSEZ-PASSER

A. Members of the staff of the Organization and experts on missions on behalf of the Organization shall be entitled to use a special laissez-passer procedure modelled on the United Nations laissez-passer procedure, to be evolved by the Administrator pursuant to regulations approved by the Commission.

B. Parties shall recognize and accept the Organization laissez-passer issued to members of the staff of the Organization and to experts on missions on behalf of the Organization as valid travel documents.

[illegible] by him in the performance of his official duties, [illegible] for the organization;

(2) facilitate such reports to [illegible] or economic conditions as far as necessary for the activities covered by his functions.

Article 3

[illegible] OF ACTIVITIES

4. The organization shall, as all other organizations with approximate authorities or juries to facilitate the proper administration of justice, secure the observance of police regulations, and prevent the commission of an abuse of the privileges and immunities not [illegible] in this Chapter.

5. If any party violates that there has been an abuse of the privileges or exercises in its territory or in any other territory or country granted by this Chapter, the following procedure shall be adopted:

(1) In the case of an abuse by the administration, representatives shall be held between the party and the organization to determine the action to be taken.

(2) In the case of an abuse by any individual referred to in paragraphs (1) or (2) of Article 1, the party which concerned that abuse, is bound to inform, after consultation with the organization, the competent and responsible authorities of the country in question in diplomatic usage accredited to the Secretary-General, requesting the representative to leave his territory.

(3) In the case of an abuse by any individual referred to in paragraph 1 and 2 of Article 4, the party which concerned that abuse has been or shall not, after consultation with the organization, in the [illegible] of [illegible], with the [illegible], requesting the [illegible] to [illegible] for an immediate replacement.

Article 4

[illegible]

6. Members of the staff of the organization and experts on missions on behalf of the organization shall be entitled to use a special [illegible] [illegible] recognized by the United Nations. [illegible] [illegible], to be issued by the [illegible] [illegible] to regulations approved by the [illegible].

7. Further such [illegible] and [illegible] the [illegible] [illegible] issued to members of the staff of the [illegible] and to experts on missions on behalf of the [illegible] [illegible] [illegible].

C. Members of the staff of the Organization and experts travelling on the Organization laissez-passer on the business of the Organization, shall be granted the same facilities for travel as are accorded to comparable categories of the staffs of diplomatic missions.

Article 9

INTERPRETATION AND SUPPLEMENTARY AGREEMENTS

A. The provisions of this Annex shall be interpreted in the light of the functions with which the Organization is entrusted by the Treaty and its annexes.

B. The provisions of this Annex shall in no way limit or prejudice the privileges and immunities which have been, or may hereafter be, accorded to the Organization by a State by reason of the location, in the territory of that State, of the headquarters or other components and agencies of the Organization. The Organization may conclude with any Party or Parties agreements supplementing the provisions of this Annex, so far as that Party or those Parties are concerned.

Text of Agreed Draft Annex III

THE PREPARATORY COMMISSION

A. A Preparatory Commission, consisting of one representative from each of the original Parties to the Treaty, shall come into existence on the day after this Treaty shall have been signed by all the original Parties. The Preparatory Commission shall remain in existence until the Control Commission has been elected in accordance with Article 4 of this Treaty.

B. Except as provided in Section 5 of this Annex, the Preparatory Commission shall take decisions by agreement among the three original parties, adopt its own rules of procedure, meet as often as necessary and determine its own place of meeting. It shall appoint an executive secretary and such staff as shall be necessary, who shall exercise such powers and perform such duties as the Preparatory Commission may determine.

C. The expenses of the Preparatory Commission may be met by a loan provided by the United Nations or by advances from governments. The repayment of loans shall be included as an item in the budget for the Control Organization's first financial period. The Preparatory Commission shall make the necessary arrangements with the appropriate authorities

of the United Nations for repayment of the loan. Advances from governments may be set off against assessments of the governments concerned levied in accordance with the provisions of Article ___.

D. Pending deposit of instruments of ratification of the Treaty by all the original Parties, the Preparatory Commission shall:

1. Conduct preliminary technical studies and consultations with regard to the location, installation, and equipping of control posts and other components of the Congrol Organization, including:

(a) geological and topographic map studies of geographical areas of the world where control posts are to be located;

(b) consultations with technical representatives of the original Parties for the purpose of adopting standard construction designs for control posts and regional offices and of choosing types of equipment for each of the four basic methods of detection;

(c) studies of the surveys which will be required for selecting sites for control posts;

(d) studies of communication requirements;

(e) consultations with the original Parties for equipping and utilizing their aircraft for routine flights and vessels to be stationed in accordance with the Treaty and its Annexes;

(f) studies of requirements for standard time transmission and reception to ensure accurate relative time at all control posts and other components of the Control Organization.

2. Draw up detailed requirements and regulations for the staffing of the Organization and invite applications for posts to be filled during the initial operations of the organization;

3. Draw up requirements and invite applications for the post of Administrator;

4. Recommend the site in Vienna of the permanent headquarters of the Organization; draw up recommendations for the provisions of a headquarters agreement defining the status of the Organization and its rights and relationship with the host country;

5. Draw up detailed plans for the day-to-day technical and administrative operations of the organization;

6. Draw up for submission to the Conference the budget for the Organization's first financial period and a recommended scale of assessments in accordance with Article ___ of this Treaty;

7. In conjunction with the United Nations, initiate the preparation of a draft agreement which would be in accordance with Article ___ of this Treaty;

8. Make arrangements for the convening of the first Conference, to be held not later than six months from the date of instruments of ratificztion have been deposited by all the original Parties.

E. 1. On the day after deposit of instruments of ratification of the Treaty by all the original Parties, or as soon thereafter as possible, the Preparatory Commission shall be enlarged, to consist of one representative from each of the original Parties to this Treaty and one representative from four other States, chosen by agreement between the three original Parties from among those states which at that time have deposited instruments of ratification of the Treaty.

2. The Preparatory Commission thus enlarged shall exercise the powers conferred upon the Control Commission by the Treaty, in accordance with the procedures therein specified for the Control Commission. After the Preparatory Commission has been enlarged and pending the appointment of the Administrator, the executive secretary of the Preparatory Commission shall exercise the powers conferred upon the Administrator by the Treaty.

3. Pending the enlargement of the Preparatory Commission pursuant to paragraph (1) of this Section, the Preparatory Commission shall continue to exercise only those functions listed in Section D. of this Annex.

8. Make arrangements for the convening of the first Conference, to be held not later than six months from the date of instruments of ratification have been deposited by all the original Parties.

E. 1. On the day after deposit of instruments of ratification of the Treaty by all the original Parties, or as soon thereafter as possible, the Preparatory Commission shall be enlarged, to consist of one representative from each of the original Parties to this Treaty and one representative from four other States, chosen by agreement between the three original Parties from among those states which at that time have deposited instruments of ratification of the Treaty.

2. The Preparatory Commission thus enlarged shall exercise the powers conferred upon the Control Commission by the Treaty, in accordance with the procedures therein specified for the Control Commission. After the Preparatory Commission has been enlarged and pending the appointment of the Administrator, the executive secretary of the Preparatory Commission shall exercise the powers conferred upon the Administrator by the Treaty.

3. Pending the enlargement of the Preparatory Commission pursuant to paragraph (1) of this Section, the Preparatory Commission shall continue to exercise only those functions listed in Section D. of this Annex.

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